



OEI News

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SECURING ARMY INSTALLATIONS WITH ENERGY THAT IS CLEAN, RELIABLE AND AFFORDABLE

From the Desk of the Executive Director

Mr. Richard Kidd Reflects on the Origins of the Office of Energy Initiatives (OEI)

It was five years ago, in October of 2010, when I joined the Army energy team from the Department of Energy's (DOE) Federal Energy Management Program. Today, for a few short months at least, I have the privilege of serving as the acting Executive Director of the Army's Office of Energy Initiatives, a program I have been intimately familiar with from its inception. I thought I would use this column to reflect back and share some of the key events and decisions that have led us to where we are today.

In my initial meetings with Assistant Secretary Hammack, we agreed that the Army needed to take a new approach to how we develop and execute energy projects, particularly large-scale renewable energy projects. We also spent significant amounts of time reviewing and digesting the multitude of renewable energy mandates and metrics. HON Hammack provided me broad latitude to develop a program office, as well as clear priorities to emphasize projects that are on Army land and provide some degree of enhanced energy security and resiliency.



Richard Kidd, the Deputy Assistant Secretary of the Army for Energy and Sustainability, meets with senior leaders and cadets to discuss West Point's energy endeavors.

INSIDE THIS EDITION

Road to Energy Security

DOD & DOE

AUSA

October Energy Action Month

Fortunately for everyone, Mr. Alan King, who then served within the Army Secretariat, was extremely passionate about all things renewable energy and had the foresight to request and secure funds for renewable energy-related analysis efforts. These funds provided us with start-up capital to hire initial contractor support and to conduct all the analysis and organizational design work required to develop a large-scale renewable energy program. The Secretary of the Army at the time, John McHugh, gave his conditional approval for a plan to set up a temporary organization, the Energy Initiatives Task Force (EITF). The EITF would only continue based on demonstrated results.

Executive Director from page 1

The momentous task of actually building the EITF fell to Mr. John Lushetsky, a true expert that I came to know and respect during my tenure at the DOE. The EITF began to grow and take shape just as the Army's overall budget started to decline and personnel reductions set in. The Assistant Chief of Staff for Installation Management provided key federal staff, including Mr. Eric Kurre and Ms. Kathy Ahsing, who are still on the team today, leading and doing great things.

The EITF quickly began to expand its capacity, forming close relationships with a variety of organizations, to include the U.S. Army Corps of Engineers, the Army Environmental Command, the Defense Logistics Agency Energy, and the Regional Environmental and Energy Offices. Of course, no projects would move forward without the additional cooperation and support from the Office of General Counsel and the Army Garrison Command teams. This team advanced a number of key projects at Fort Detrick, Maryland; Fort Drum, New York; and Fort Huachuca, Arizona. New solicitation tools were developed such as the Renewable Energy Services Agreement (RESA) / Power Purchase Agreements (PPAs) and Multiple Award Task Order Contracts (MATOC). These successes were sufficient to convince the Secretary of the Army to convert the task force into a permanent organization, the Office of Energy Initiatives (OEI), in September of 2014. Ms. Amanda Simpson was then on board as the Executive Director, and Ms. Joyce VanSlyke continued to manage all the communications, congressional relations and public engagement activities.

With the recent departure of our Executive Director, we are now in the process of recruiting someone who can join the Army team as a dedicated career civil servant. He or she will be responsible for continuing the normal path of organizational development by reviewing and streamlining current processes and procedures, as well as looking for new "products" or relationships that can be formed with industry, Army installations, and other federal agencies.

The new Executive Director will also stay apprised of new and emerging technologies, so that the Army is positioned to take advantage of developments in such areas as power storage and secure micro-grids.

Today, the OEI is a permanent, enduring part of the Army structure. The OEI team, comprised of a civilian and contractor workforce, continues to work hard on fulfilling the OEI mission to increase Army Installation resiliency through energy security and sustainability. The mission will be achieved in large part through planning and executing a comprehensive, cost-effective portfolio of large-scale renewable energy projects that leverage private sector financing. The OEI is poised to continue its aggressive pace and I am excited to be a part of the team as it continues to collaborate with the energy industry and government agencies to make the mission a success.

– **Richard Kidd, IV**
Deputy Assistant Secretary of the Army
(Energy & Sustainability)



Progress on the Road to Energy Security:

Fort Hood, Texas Moves Closer to Contract Award for Largest Renewable Energy Project in the Army

The contract award for a large-scale renewable energy solar and wind project at Fort Hood, Texas is expected to be announced in the next several weeks. Once complete, the combined ~15 megawatt (MW) solar and ~50 MW offsite wind project will have a total capacity of ~65 MW. This hybrid project is a collaboration between the Army Office of Energy Initiatives, Fort Hood, and the Defense Logistics Agency.

- This is the Army's first hybrid (solar and wind) renewable energy project, the first to include both on- and off-installation generation, and the Army's largest single renewable energy project to date.
- This project is expected to save the Army a minimum of \$175 million over the life of the contract.
- The solar project on Fort Hood will be micro-grid compatible to enhance energy security.
- A groundbreaking event is scheduled for January, 2016.



Fort Hood, Texas – Soon to be the home of the largest renewable energy project in the Army

Commission Testing Complete for 28 MW Biomass Facility at Fort Drum, New York -- Ensuring 100 Percent Energy Security



The completed substations at Fort Drum, NY. To the right stands the interconnection to the 115 kilovolt transmission grid.

The Army announced a contract award to ReEnergy Black River LLC for electricity in September 2014. In November 2015, the final interconnection tests were conducted and the Biomass Generation Facility (BGF) is fully operational, producing 100% of the installation's on-site electricity requirements.

- The project is providing the installation with energy security through the new transmission line from the on-site BGF to the installation's North and South substations.
- These connections will enable Fort Drum to maintain mission critical operations in the event of a system-wide outage.
- The BGF capacity of 60 MW exceeds Fort Drum's current peak load of ~28 MW and provides excess electricity to the grid to support the community.

Progress on the Road to Energy Security from page 3

Fort Detrick, Maryland ~15 MW Solar Project on Fast-Track to Completion

The Army, Defense Logistics Agency Energy, and Ameresco, Inc., held a project groundbreaking event in April 2015. The installation of over 60,000 solar panels on 67 acres on Fort Detrick is three months ahead of schedule, and final testing is expected to be completed by the end of the 2015. A ribbon cutting event is anticipated to take place in March or April, 2016.

- The project includes a 26-year term contract and will be micro-grid compatible to enhance energy security.
- All electricity from the solar facility will be consumed by Fort Detrick.
- Commercial operations are expected to begin in March 2016.

DOE/DoD: A Collaboration that Works

The signing of a Memorandum of Understanding (MOU) in July 2010 formalized the already existing relationship between the Department of Defense (DoD) and the Department of Energy (DOE). The two agencies have been working together to coordinate and collaborate efforts to enhance national energy security and demonstrate the Federal Government's leadership in transitioning America to a more sustainable economy. On October 21, the Deputy Secretary of DOE hosted a meeting with the Department of Defense and the Services' Assistant Secretaries to explore ways to collaborate even further.

Increasing threats, both natural and man-made, affect the ability of the DoD to carry out its mission. Renewable energy produced on Army installations increases energy security and enhances mission effectiveness. Energy security means having assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet mission essential requirements.

For DOE, as the Federal agency responsible for the development and deployment of advanced energy technologies, partnering with the Army provides the opportunity to accelerate deployment of its technologies and expertise toward the critical economic and energy security needs of the United States. The Army is leveraging this partnership within its renewable energy initiatives. The greatest opportunity for Army and DOE collaboration occurs as technology moves into development and deployment phases. Through the Office of Energy Initiatives (OEI), U.S. Army Corps of Engineers, and Assistant Chief of Staff for Installation Management, the Army and DOE are working together on a multitude of renewable energy and sustainability initiatives. These include the evaluation of energy systems, such as Combined Heat and Power (CHP). Additional deployment and pilot testing of emerging energy technologies, such as micro-grids; electric vehicle charging; and vehicle to grid technology are underway.

Information exchange and professional development is another collaborative success story. The DOE-hosted Energy Exchange, part of DOE's Federal Energy Management Program, provides training and professional development opportunities to help federal agencies meet and track their sustainability and energy related requirements and goals. Sessions cover cost-effective best practices and information about cutting-edge, energy-efficient technologies to meet federal and agency-specific goals for reductions in energy, water, petroleum use, and greenhouse gas emissions. The training sessions are led and moderated by subject matter experts from the public and private sectors, and represent expertise from all levels of project and policy implementation. DOE and OEI also work together on the development of human capital by integrating National Lab staff within the OEI.

AUSA

On October 13, Honorable Katherine Hammack, Assistant Secretary of the Army (Installations, Energy & Environment) hosted a panel discussion on “Enabling Victory in a Complex World: Resilient Army Installations” at the Association of United States Army (AUSA) annual meeting. Panelists included LTG David Halverson, U.S. Army Assistant Chief of Staff for Installation Management; Mr. Jud Virden, Ph.D., of Pacific Northwest National Laboratories; Ms. Maureen Ehrenberg of Jones, Lang, LaSalle; and Ms. Kathleen White, Ph.D., Army Corps of Engineers (USACE).

HON Hammack began by discussing the crucial importance of resiliency to the Army’s ability to overcome the challenges and uncertainties of the current global environment.

Increased urbanization, rising populations, climate change, technology proliferation, financial constraints and increased deployments around the world all affect and present challenges to the Army’s mission, HON Hammack explained. To address these challenges, the Army Energy Team developed the Energy Security and Sustainability (ES2) Strategy to foster more adaptable and resilient installations, able to support our forces in an increasingly complex, uncertain, and rapidly changing world. ES2 is informed by and intended to complement the Army’s operating concept to fight and win in a complex world, and there is perhaps nothing more complex than the nation’s electric grid. ES2 represents a turning point from viewing resource considerations as restraints on operational effectiveness to a perspective that views the critical role of energy, water, and land resources as mission enablers.

Optimizing energy use through energy efficiency, diversifying and expanding energy supply, and focusing on resource-informed decision making, among other efforts, will enable continuity of operations while adapting and responding to change.



HON Katherine Hammack, LTG Dave Halverson, and other senior Army and industry representatives speak at the 2015 AUSA annual meeting. Photo courtesy AUSA

Lt. Gen. Halverson provided commentary on the Army’s energy-related lessons learned from past conflicts and the increased efficiency, resiliency and sustainability efforts the Army is engaged in at its installations, both at home and abroad.

Dr. Virden spoke about the trends in renewable energy development in the private sector. Ms. Ehrenberg discussed the evolution and trends in international facilities management. Dr. White spoke in some detail on USACE’s overall response to climate change, including water resource management and the planning necessary to remain resilient to increased instances of flooding, severe droughts, and heat waves. One of the highlights of her presentation was a demonstration of a climate change predictive model that suggested the need to prepare for an additional 50 Category Four heat waves in the coming decades.

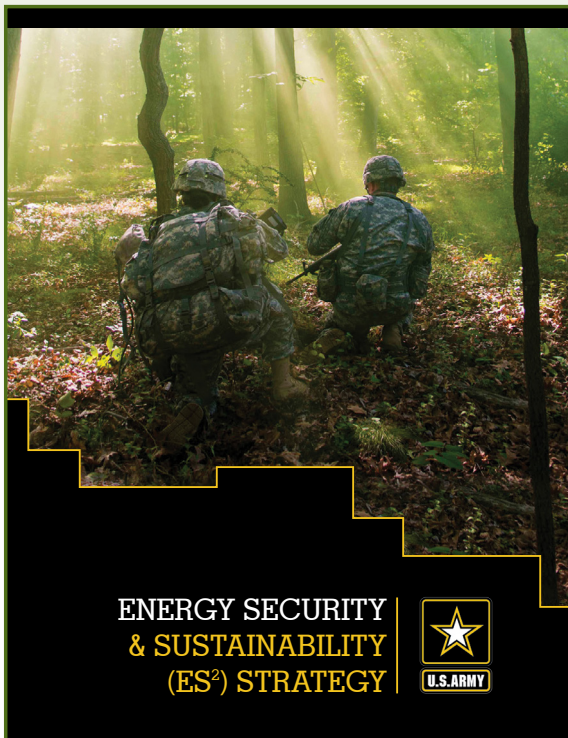
Held every October, the AUSA Annual Meeting attracts over 26,000 attendees and provides numerous professional development opportunities and informative presentations on pertinent military and national security subjects.

October Energy Action Month

As the largest Federal consumer of energy, the Department of Defense (DoD) has a responsibility to lead by example in promoting energy efficiency, energy resilience, and energy security throughout its operations. To demonstrate its support for October Energy Action Month, DoD and other Federal agencies engaged in a wide range of activities to underscore how central energy is to the country's national prosperity, security, and environmental well-being.

The Pentagon and the Mark Center, two of DoD's largest buildings, implemented several energy conservation measures during October to show its commitment to energy action. The two buildings lowered light levels to emergency lighting in common areas where daylight is abundant. By turning off 5,000 hallway lights during October, The Pentagon estimated it saved enough energy to power 100 American homes for an entire month.

As part of Energy Action Month, the Office of the Assistant Secretary of Defense for Energy, Installations and Environment hosted a Virtual Energy Summit, a series of energy awareness webinars developed to address the DoD's current energy needs and future challenges across the full spectrum of military missions. The Department of Energy's Federal Energy Management Program (FEMP) released a guidebook entitled "Save Energy, Money, the Future" to help Federal energy managers develop programs aimed at increasing energy efficient behaviors for employees at Federal facilities. In addition to supporting these activities, during the month of October, the Army released several publications and conducted events based on its theme for Energy Action Month, "Energy Action Today = Resiliency Tomorrow." HON Hammack and other senior leaders highlighted the responsibilities of key team members, as well as the recently published Energy Security and Sustainability (ES2) Strategy, which provides a roadmap for the management of energy, water, land, and other resources to achieve energy security and sustainability.



<http://www.army.mil/e2/c/downloads/394128.pdf>



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