

# From the Desk of the Executive Director

Office of Energy Initiatives (OEI) Renewable Energy Projects Continue to Move Forward

A lot can happen in a couple of months. When I last took to these pages in March, we were celebrating the ribbon cutting on the Fort Huachuca, Arizona solar project. In the two months since, we have broken ground on four more solar arrays, bringing another 105 megawatts (MW), alternating current (AC), into the construction phase. We will also soon announce a Notice of Intent to Award (NOIA) of a contract for approximately 85MW capacity to supply Fort Hood, Texas with a mix of renewable energy. We began evaluations of proposals on a Combined Heat and Power (CHP) facility at Redstone Arsenal, Alabama. While not making the OEI news feed, a petition for a Certificate of Convenience and Necessity was filed for one project in April, and in May the Army held public

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Environmental Law and Policy Annual Review (ELPAR) American Council on Renewable Energy (ACORE) environmental hearings for another. The US Army Corps of Engineers (USACE) Huntsville Engineering Center (HNC) released a Request Proposal (RFP) for a 3.1MW solar array at Fort Campbell, Kentucky utilizing the Multiple Award Task Order Contract (MATOC) established by the OEI in collaboration with USACE HNC.

These milestones represent real advancement and are representative of the varied progress that the Army is making with regard to fulfilling our mission of providing clean, reliable and affordable energy.

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The four groundbreakings (Forts Detrick, Benning, Gordon, and Stewart – more details on the following pages) represent agreements with both public utilities and private companies. The NOIA at Fort Hood is the first hybrid project for the OEI. It combines a large onsite solar array that will contribute to the installation's energy resiliency with offsite wind generation that contributes to the economic viability of the project. All electricity from the renewable projects will be consumed by Fort Hood. The resulting contract will also integrate electricity from traditional sources to fulfill the installations total electricity needs.

The RFP at Fort Campbell is a significant milestone in our renewable energy efforts, demonstrating the utility of the MATOC for smaller scale projects from the installations. Fort Campbell's Director of Public Works employed the processes detailed in the OEI "Guide to Developing Energy Projects Leveraging the Private Sector" (downloadable from the OEI website: www.oei.army.mil) with assistance from HNC to use the pre-approved MATOC as the contracting vehicle. The project was also innovative in that it utilizes a grant from the Department of Energy to finance the 3.1MW project and another grant from the State of Kentucky to construct an adjoining 1.9MW portion of what will be a 5MW solar array.

While there is much excitement around groundbreakings and ribbon cuttings, we still continue to work for long-term, institutional change. To do so we look inward at Army and Department of Defense processes, practices, procedures, and policies through engagement with senior leadership and installation staff. But we also look outward through engagement with industry at conferences and meetings as well as postings on our website.

On a separate but related subject, I was asked directly at a conference last month why we label our solar projects as MW AC when most everyone else simply labels their projects as MW – Direct Current (DC). The simple answer is that the Army is purchasing power and it is delivered as AC.

When signing a contract to purchase electricity or compare an on-site generation project to



the power consumption of the installation, it is calculated in AC. That's the way most every business buys and evaluates power as well as every homeowner. Electricity from biomass, geothermal, or wind – power that comes from a turbine – is generated in AC. In contrast, solar panels produce DC, similar to the power as supplied by a battery. However, the process to convert the DC power generated to AC power that will be utilized is imperfect and results in losses. These losses can be on the order of 20 percent or more. So why aren't all project power quantities reported in AC?

Well, the larger DC value allows significantly more bragging rights. The OEI could say that we have 145MW of solar under construction rather than 105MW AC, but that isn't an accurate representation of the power that would be available to Army installations to increase their resiliency. However, for comparison purpose, the OEI will continue to publish the approximate DC size of solar arrays in our project Fact Sheets.

The Army is committed to improvement and transparency in renewable energy project development. Please let me know if you have suggestions or questions that could assist us in performing our mission.

 Amanda Simpson, Executive Director, Army Office of Energy Initiatives

# **Project Updates**

# Fort Detrick, Maryland

# Large-Scale Renewable Energy Project Groundbreaking Event – April 1, 2015

On April 1, 2015, the Army, the Defense Logistics Agency Energy, Fort Detrick, and Ameresco, Inc. conducted a groundbreaking ceremony for a large-scale, renewable energy solar facility at Fort Detrick, Maryland. The ~15 MW, AC (~18 MW DC) project includes a 26-year term contract for the construction, purchase and delivery of electricity. The project is planned to be operational by the Spring of 2016. However, Ameresco has indicated a plan to accelerate construction so it can be completed earlier.

Fort Detrick, Maryland Groundbreaking



The Fort Detrick groundbreaking event on April 1, 2015. From L to R: Ms. Amanda Simpson, Executive Director, Army Office of Energy Initiatives; Mr. Richard Kidd, Deputy Assistant Secretary of the Army, Energy and Sustainability; Mr. John Conger, Performing the Duties of Assistant Secretary of Defense for Energy, Installations and Environment; Rep. John Delaney, Maryland 6th Congressional District; Maj. Gen. Brian Lein, Commanding General U.S. Army Medical Research and Materiel Command, Fort Detrick; Hon. Katherine Hammack, Assistant Secretary of the Army for Installations, Energy and Environment; Ms. Christy Goldfuss, Managing Director, White House Council on Environmental Quality; Mr. George Sakalaras, President and CEO Ameresco; Lt. Gen. David Halverson, U.S. Army Assistant Chief of Staff for Installation Management and Commanding General Installation Management Command; and Mr. George Atwood, Deputy Commander, Defense Logistics Agency Energy.

# Georgia 3x30 Projects Break Ground

# Forts Benning, Gordon, and Stewart Solar Projects Begin Development

Collectively referred to as the Georgia 3x30, the projects on Forts Benning, Gordon, and Stewart represent the largest renewable energy project to date within the Department of Defense. All projects are planned to be operational in 2016.

The projects include a 35-year easement between the Army and Georgia Power. The Army will continue to purchase power through an existing General Services Administration (GSA) Area-wide Public Utility Contract, and Georgia Power will develop, finance, design, install, own, operate, and maintain the solar projects on each installation.

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#### Project Updates Continued

### Fort Benning Solar Project Breaks Ground

On April 17th, more than 100 people, including local officials and media, joined the Office of the Assistant Secretary of the Army (Installations, Energy and Environment) OASA (IE&E), Fort Benning, the U.S. Corp of Engineers, the General Services Administration, and Georgia Power to participate in a groundbreaking event for the 30 MW AC (~42 MW DC) solar project on Fort Benning. The Fort Benning project consists of approximately 136,000 solar panels on 200 acres.



#### Fort Benning Groundbreaking

The Fort Benning groundbreaking on April 17, 2015. L to R: Lt. Col. Tom Woodie, Deputy Commander of the Savannah District, United States Army Corps of Engineers, Savannah, Georgia; Ms. Peggy Martin, Russell County Commissioner; Mr. Paul Bowers, Chairman, President and Chief Executive Officer, Georgia Power; Congressman Sanford Bishop, Georgia 2nd Congressional District; Hon. Katherine Hammack, Assistant Secretary of the Army for Installations, Energy and Environment; Maj. Gen. Scott Miller, Maneuver Center of Excellence Commanding General; Mr. Kevin Kampschroer, Acting Senior Sustainability Official, U.S. General Services Administration; and Ms. Amanda Simpson, Executive Director of the Army Office of Energy Initiatives.

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#### Project Updates Continued



The Fort Gordon groundbreaking event on May 14, 2015. R to L: Mr. Stan Wise, Georgia Public Service Commissioner; Mr. Kenneth Coleman, Senior Vice President of Marketing, Georgia Power; Ms. Amanda Simpson, Executive Director of the Army Office of Energy Initiatives; MG Stephen G. Fogarty, Commanding General, Cyber Center of Excellence Command; Mr. Richard Kidd, Deputy Assistant Secretary of the Army, Energy and Sustainability; Mr. Torre Jessup, Regional Administrator, Southeast Sunbelt Region, General Services Administration; and LTC Tom Woodie, Deputy Commander of the Savannah District, U.S. Army Corps of Engineers commemorate the groundbreaking at Fort Gordon.

# Fort Gordon Solar Project Underway

On May 14, OASA (IE&E), Fort Gordon, the General Services Administration, and Georgia Power participated in the groundbreaking for the 30 MW AC solar project at Fort Gordon. Fort Gordon identified 270 acres for the project that will consist of approximately 139,000 solar panels.

### **Fort Stewart Solar Project**

On May 15, OASA (IE&E), Fort Stewart, the General Services Administration, and Georgia Power participated in the groundbreaking for a 30 MW AC solar project at Fort Stewart. Fort Stewart has identified 250 acres for the project consisting of approximately 139,000 solar panels.



The Fort Stewart groundbreaking event on May 15, 2015. R to L: Mr. Torre Jessup, Regional Administrator, Southeast Sunbelt Region, General Services Administration; Mr. Kenneth Coleman, Senior Vice President of Marketing, Georgia Power; Mr. Richard Kidd, Deputy Assistant Secretary of the Army, Energy and Sustainability; BG James Blackburn, Jr., Task Force Marne Commander; Mr. Chuck Eaton, Chairman, Georgia Public Service Commission; Ms. Amanda Simpson, Executive Director of the Army Office of Energy Initiative; and LTC Tom Woodie, Deputy Commander of the Savannah District, U.S. Army Corps of Engineers commemorate the groundbreaking at Fort Stewart.

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#### Project Updates Continued

### Army Invites Public to Comment on Schofield Barracks Project Draft EIS

On May 21 and 22nd, The U.S. Army invited the public to provide input on the draft Environmental Impact Statement (EIS) for the construction and operation of a 50 MW biofuel-capable power generation plant at Schofield Barracks, Hawaii. The project will be constructed, owned, operated, and maintained by Hawaiian Electric Company.

The Schofield Generating Station Project would be a source of renewable power that would benefit the Army, Hawaiian Electric Company and Oahu residents by supplying power to the island-wide grid during normal operations. The generating station project would also provide an energy security and resiliency service for Schofield Barracks, Wheeler Army Airfield, and Field Station Kunia by serving as a backup source of power during power outages.

# U.S. Army Corps of Engineers Issues RFI for Los Alamitos Project

On May 1, 2015, the U.S. Army Corps of Engineers issued a Request for Information (RFI) seeking to identify interested sources for the development of an integrated energy resilience system, to include on-site photovoltaic electricity production, at Joint Forces Training Base (JFTB), Los Alamitos, California. The proposed project would enhance energy security at JFTB Los Alamitos. The RFI can be viewed here: <u>https://www.fbo.gov/spg/USA/COE/DACA05/SPL-RE-15-0501/listing.html</u>.



# **Recent Engagements**

# Army Discusses Renewable Energy Project Pipeline at ACORE

On Earth Day, April 22, Office of Energy Initiatives Executive Director, Ms. Amanda Simpson joined Mr. Richard Kidd, Deputy Assistant Secretary of the Army, Energy and Sustainability, at the annual meeting of the American Council on Renewable Energy (ACORE) in Washington, DC. Before an audience of private sector renewable energy developers, manufacturers and financiers, Mr. Kidd provided an update on the Army's renewable energy project pipeline and the lessons learned from the various procurement methods. Ms. Simpson spoke of the Army's best practices in streamlining Requests for Proposals and shortening timelines to attract financing for renewable energy projects. Both presentations can be found on the OEI web site.

# Bloomberg Energy Finance Holds Analyst Day, OEI Holds Energy Workshop

On May 26, Bloomberg New Energy Finance held an Analyst Day at the Pentagon highlighting emerging trends in energy technologies. The event included sessions on microgrids and energy storage, and provided an outlook for gas, wind, and solar.

On May 27-29, the Office of Energy Initiatives held a lessons learned workshop on the development of privately financed renewable energy projects within the Department of Defense. Sessions included presentations on market drivers, financing structures and challenges, and opportunities with DoD financing models.

# OEI Executive Director Delivers Remarks at ELPAR Conference

On Friday, April 10, Office of Energy Initiatives Executive Director Ms. Amanda Simpson participated in a panel at the 2015 Environmental Law and Policy Annual Review (ELPAR) conference on Capitol Hill. The panel members discussed the Military-Environmental Complex, as described in an article by Ms. Sarah Light of Wharton School of Business. Ms. Simpson's response to the article can be viewed on the OEI web site.



OEI Executive Director Ms. Amanda Simpson and fellow ELPAR panelists.



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