











## **Energy Master Planning for Resilient Military Installations Training Workshop**

December 5-6, 2017

## Dear Distinguished Colleague,

The Federal Facilities Council of the National Academies of Sciences, Engineering, and Medicine in partnership with the International Energy Agency EBC Program Annex 73, DOD, US Army, the American Society of Heating, Refrigerating and Air-Conditioning Engineers and the U.S. Department of Energy (FEMP) would like to invite you and representatives of your organization to participate in the "Energy Planning for Resilient Military Installations" Training Workshop to be held in Washington, D.C. at the National Academy of Sciences, Engineering, and Medicine (2101 Constitution Ave., N.W.) on December 5-6, 2017.

Until recently, most planners and energy managers of military installations addressed energy systems for new facilities and renovation projects on an individual facility basis without consideration of energy sources, renewables, storage, or future energy generation needs. The recent memo from the Assistant Secretary of Defense for Energy, Installations, and Environment OASD (EI&E)) dated March 31, 2016 requires that coordination effort be made to gain synergy between current energy initiatives and future planned projects to minimize energy use and maximize cost reduction, resulting in Installation Energy Plans as an integral part of the Installation Master Planning process. In recent years, natural events such as Hurricane Sandy and reliability issues such as the lack of maintenance or testing of emergency backup systems have caused energy disruptions on military installations leading to impacts on critical missions. To remediate these energy resilience risks, DoD is pursuing energy resilience as a priority and defines it as the ability to prepare for and recover from energy disruptions that impact mission assurance on military installations. DoDI 4170.11, Installation Energy Management provides a description of technologies which could support energy resilience. Energy resilience requirements are required to be incorporated into the Installation Energy Plans.

The Training Workshop will address the following topics:

- DOD Requirements for Installation Energy Plans (IEP)
- Establishing energy goals
- Data required for Installation Energy Planning
- Scope and boundaries of IEPs
- Establishing the Baseline, Base Case and Scenarios
- Mission critical facilities and their energy requirements
- Energy Supply strategies

- Power and thermal microgrids for mission critical facilities
- Resilience of energy systems, its matrix and evaluation
- Multi-Criteria Decision Analysis
- Tools for Installation-wide Energy Planning
- Implementation strategies
- Examples of best practices

Formal presentations by energy experts will be complemented by moderated formal and informal discussions. Networking and technical exhibits demonstrating the state-of-the-art technologies and best practices are planned during the evening reception in the beautiful Leland Atrium at the Institute of Peace, 2301 Constitution Avenue NW, Washington, DC on December 5th, 2017. This Workshop is designed for decision-makers, planners, energy managers, engineers, architects, energy performance companies and industry partners involved in installation-wide energy projects. We ask you to mark this date on your calendar and are looking forward to seeing you in Washington.

With kind regards, Alexander Zhivov, Workshop chair

For any questions, please contact Alexander Zhivov: Dr. Alexander Zhivov, US Army ERDC-CERL, U.S.A. E-Mail: Alexander.M.Zhivov@usace.army.mil

A block of rooms (Code: USACE) have been reserved at the DoubleTree by Hilton (Crystal Plaza). 300 Army Navy Drive, Arlington, VA. Phone: +1 703 416 3843

For online registration, please go to registration website: Blockedhttps://www.eventbrite.com/e/energy-master-planning-for-resilient-military-installations-registration-36118702010



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