# U.S. ARMY CORPS OF ENGINEERS OFFICE OF COUNSEL DEEP ENERGY FORUM LEGAL CHALLENGES

U.S. Army Engineering and Support Center, Huntsville Prepared by Margaret Simmons 16 September 2016

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."





File Name

# **DEEP ENERGY RETROFIT (DER)**

#### **Overview**

### **Driver** /Basis

<ul> <li>Current renovation projects could, if combined with a DER, achieve significant energy savings.</li> <li>If combined with ESPC, be financed for up to 25 years and paid from consumption savings.</li> <li>Savings ensured by measurement &amp; verification (M&amp;V).</li> <li>If combined with UESC, project could be financed for up to 25 years and paid from savings</li> </ul>	<ul> <li>Energy Independence &amp; Security Act (EISA) 2007</li> <li>Executive Order 13693 (March 2015) *<i>Revoked EO 13423 of Jan 2007</i>*</li> <li>OSD MEMO, Energy Savings Performance Contracts and Utility Energy Services Contracts (24 Jan 2008)</li> <li>DODI 4170.11</li> </ul>
Significant Obstacles	<b>On-Going Activities</b>
<ul> <li>Biggest issue is how to contract for this arrangement: <ul> <li>Have 2 contractors performing work together</li> <li>Have prime solicit for an ESCO sub</li> <li>Provide ESCO/UESC equipment as GFE to other contractor</li> <li>Determination of savings achieved and how to allow payment to the ESCO</li> <li>Just award as traditional ESPC/UESC task order</li> </ul> </li> </ul>	<ul> <li>Trying to identify a renovation project to use as a pilot for a Deep Energy Retrofit (within Army)</li> <li>Initial project fell through due to lack of procurement strategy (waiting too late in process to work it out)</li> </ul>

2

### WHAT HAS CHANGED?

The Energy Policy Act 1992 had this language: 42 USC 8287:

- (a)(1) "The head of a Federal agency may enter into contracts under this title solely for the purpose of achieving energy savings and benefits ancillary to that purpose."
- 42 USC 8287a: Payment of costs "...may be paid only from funds appropriated or otherwise made available to the agency for fiscal year 1986 or any fiscal year thereafter for the payment of energy, water, or wastewater treatment expenses (and related operation and maintenance expenses).
- EISA Dec 2007 added this to 42 USC 8287(a)(2):

(E) FUNDING OPTIONS-In carrying out a contract under this title, a Federal agency may use any combination of –

(i) appropriated funds, and

(ii) private financing under an ESPC





# AUTHORITY

- Deep Energy Retrofit (DER) is not defined in Army (or DoD) publications so what is the authority to do DER?
- DoDI 4170.11, Dec. 11, 2009, Paragraph 3.b.(1)(a)(3) discusses sustainable building designs. This paragraph states that "All new facility construction and major renovations shall perform 30 percent better than American Society of Heating, Refrigerating, and Air Conditioning Engineers Standard 90.1-2004.
- DoDI 4170.11, Dec. 11, 2009, Paragraph 3.b.(1)(b)(1) states: The DoD Components shall ensure that the energy efficiency measures are incorporated into repair and minor construction projects using available O&M funding. The DoD Components shall also ensure that sufficient O&M funding is available to support other projects using alternative financing vehicles such as UESC and ESPC.





## **AUTHORITY (CONT.)**

EO 13693 (March 19, 2015)

- Revoked EO 13423
- Sec. 3 (h) Improve building efficiency, performance and management by: (i), (ii) and (iii) – having at least 15% of total square footage of existing buildings "comply with the revised Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings – with target of net zero by 2025.
- And (viii) including the incorporation of climate-resilient design and management elements *into the operation, repair and renovation of existing agency buildings* and the design of new agency buildings. (Resilient means the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.)





# DER PROGRAMMATIC CHALLENGES & PHILOSOPHY

### Energy Master Plan

- Develop phased execution with multiple funding sources
- Focus on energy systems to support groups of facilities to gain equipment efficiency, reduced maintenance and energy reduction
- Employ projects to shift peak demand, add energy storage to reduce demand utility charges

### Bundling

- HNC encourages ESCOs to bundle long payback ECMs with short payback ECMs
- Bundling approach requires we take a master planning or holistic approach

### Combining SRM with ESPC

 HNC has been successful in combining SRM with ESPC to leverage savings

### O&M

 Only include for complex ECMs or where base does not have resources.
 O&M on simple measures causes other ECMs to be dropped

# Implementation of ECMs outside of ESPC

 Must be careful in how you execute projects using appropriated dollars (don't take all the low hanging fruit)





## **QUESTIONS?**

MARGARET SIMMONS U.S. ARMY CORPS OF ENGINEERS HUNTSVILLE, AL 35816 (256) 895-1101 MARGARET.P.SIMMONS@USACE.ARMY.MIL



