Engineering and Support Center, Huntsville
Energy Capabilities Overview

Energy Huntsville Meeting

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U.S. Army Corps of Engineers
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Our Charter
ER 10-1-22

Huntsville Center has programmatic / functional boundaries in lieu of geographical boundaries. We execute programs and projects that:

Are national or broad in scope

Require integrated facilities or systems that cross geographical division boundaries

Require commonality, standardization, multiple site adaptation, or technology transfer

Require a centralized management structure for effective control of program development, coordination and execution

Require functions to be performed that are not normally accomplished by a HQUSACE organizational element
Huntsville Center Footprint

Annual Program: $2.8B

- Installation Support $2,050M
- Engineering $50M (includes Medical CX of $15M)
- Chemical Demil $166M
- Ordnance Explosives $390M
- Environmental and Munitions CX $109M
- Misc $29M

Personnel: 885

- 775 – Huntsville, AL
- 50 – Omaha, NE
- 10 – Richmond, KY
- 23 – Alexandria, VA
- 3 – Fort Worth, TX
- 4 – San Antonio, TX
- 1 – Champaign, IL
- 18 – Afghanistan
- 1 – Kazakhstan

Customers: Very diverse customer base which includes DOD and many Federal government agencies
Awards History

Fiscal Year

2007  2008  2009  2010  2011  2012  2013  2014

Actions

Obligations

Millions

$-  $500  $1,000  $1,500  $2,000  $2,500

0  1,000  2,000  3,000  4,000  5,000  6,000  7,000

BUILDING STRONG®
VISION

The preeminent energy Center of Expertise and Organization of Choice for delivering full-scale energy services within the Federal government, bringing unparalleled leadership to resolving the most pressing energy challenges and leading the way as an enabler of strategic partnerships and global provider of holistic, comprehensive, integrated, and optimized energy management solutions in support of the Army, DoD, Federal agencies, and the Nation.

MISSION

Manage execution of the Army’s portfolio of energy programs, serving the needs of Army Landholding Commands, Civil Works, DoD, and Federal agencies worldwide by providing specialized technical expertise, project, and acquisition services and delivering innovative, resilient, and sustainable energy strategies and solutions in support of national interests.
Energy Portfolio Management
Pathway to Net Zero, Energy Security and Meeting Federal Mandates

PPA – Power Purchase Agreements
REM – Resource Efficiency Manager
CUP – Commercial Utility Program
MDMS – Metering Data Monitoring System
FRP – Facility Reduction Program
ECIP – Energy Conservation Investment Program
UESC – Utility Energy Services Contracting
ESPC – Energy Savings Performance Contracting
EEAP – Energy Engineering Analysis Program
UMCS – Utility Monitoring and Control Systems

Execution/Acquisition
- ECIP
- UMCS
- FRP
- PPA

Conservation Measures & Reduction Measures
- Energy Master Plans
- Net Zero Roadmaps
- EEAP

Investigation & Planning
- REM
- CUP
- MDMS

Metering
- UESC

Behavioral Changes
- ESPC
- MDMS
- CUP
Key FY15 Goals

- Tenaciously articulating the energy message, showcasing energy tool box to the external environment
- Emphasizing NetZero; bringing holistic, integrated energy approach and solutions
- Assistance with ESPC to DoD and Federal sector
- Increasing strategic partnerships
- Becoming a training and education source
Established Best Practices

- Army Net Zero Progress Report, May 2013:
  - Alternative financing mechanisms (ESPC, UESC, PPAs)
  - Resource efficiency managers (REMs)
  - Planning / energy evaluations (audits) (EEAP)
  - Energy / Utility Mgmt Control Systems (EMCS/UMCS)
Synergistic Energy Programs

- **Leveraging the Energy Tool Box:** CEHNC manages a suite of programs and acquisition vehicles to support Army and DoD in meeting energy, water, waste and renewable energy mandates.

- **Begins with Planning - Master Plans/Energy Audits (EEAP)**
  - The cornerstone for developing effective energy management strategies, capital investment and actionable plans / projects to meet reduction, net zero and renewable energy goals.
  - Audits are scalable product for a holistic, integrated and comprehensive planning approach that leverages scale (vs. fragmented approach).
  - Create vision with comprehensive energy master plan.
Energy Savings Performance Contracting (ESPC)

- **Overview.** Leverages industry expertise and private sector financing to make infrastructure upgrades to federal facilities to reduce energy, water consumption, and waste stream
  
  ► CEHNC is recognized expert in third party financing (ESPC, UESC) across federal government
  ► Financed for up to 25 years and paid from consumption savings
  ► Savings ensured by measurement & verification (M&V)
  ► Provides operations and maintenance for more complex improvements; enables DPW to reallocate limited resources.
  ► CEHNC uses nationwide ESPC Multiple Award Task Order Contract (MATOC)

- CEHNC to be relied upon heavily for Army’s commitment the President’s Performance Contracting Challenge ($4B thru 2016)
  
  ► In FY14 executed 16 task orders with capital investment of $243.6M
  ► CEHNC has robust FY15 pipeline and anticipates awarding 16 ESPC projects with a projected capital investment of $250M+
  ► New MOU with DOE Federal Energy Management Program (FEMP)
ESPC Program Statistics

HNC Awards

<table>
<thead>
<tr>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
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<td>2</td>
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<td>16</td>
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3rd Party Capital Investment

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<th>FY12</th>
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<th>FY14</th>
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<tr>
<td>$25M</td>
<td>$85M</td>
<td>$208M</td>
<td>$189M</td>
<td>$243.6M</td>
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Annual MBTU Savings

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<th>FY10</th>
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<tr>
<td>75K</td>
<td>315K</td>
<td>696K</td>
<td>984K</td>
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Utility Energy Services Contracting (UESC)

- **Overview.** Similar to ESPC but uses utility company expertise and capital to meet Federal mandates
  - Difference is the ability to go to the Utility (existing relationship) rather than an ESCO (new partner)
  - Limited to a 10-year contract term for Army installations

- Allows utilities to provide Federal customers:
  - Energy and water efficiency improvement projects
  - Renewable energy projects
  - Demand reduction services

- FY14: CEHNC awarded three UESCs with capital investment of $48.4M as well as two Utility Service Contracts at Fort Campbell with capital investment of $14.25M

- Growth Area:
  - Robust FY15 pipeline with anticipated award of 6 projects with capital investment of approximately $33.5M
Power Purchase Agreement (PPA)

- Army must meet DoD statutory goal to produce or consume from renewable sources 25% of its total facility energy needs by 2025, with goal of net zero energy use by 2030
- CEHNC supports the Army in achieving renewable energy statutory goals with project execution via the PPA MATOC task orders and stand-alone PPA contracts
- PPAs provide for the purchase of energy from renewable and alternative energy production facilities that are designed, financed, constructed, owned, operated and maintained by a third party developer
- Under the authority of Title 10 U.S.C. §2922a the Government agrees to purchase power generated by the system, at a specified unit cost, for up to 30 years

Diagram:
- Installation
- Easements
- Lease
- Power Purchase Agreement
- Third Party DEV
- Interconnection Agreement
- Utility Company
Support to Office of Energy Initiatives (OEI)

- **Overview.** Established by Secretary of the Army to centrally manage the implementation of cost effective, large scale (> 10MW) renewable and alternative energy projects leveraging private sector financing.

- CEHNC awarded $7B Power Purchase Agreement (PPA) MATOC in FY13. Ninety-one companies awarded technology specific base contracts: 50 solar; 20 wind; 15 biomass and 6 geothermal
  - Critical tool to support Army’s large scale renewable energy goals
  - Developed in support of the Army’s Congressionally mandated 1GW renewable and alternative energy goal
  - CEHNC directly supports installations with small-scale renewable projects (< 10MW)

- **Current Acquisitions:**
  - Redstone Arsenal 14 MW Solar PV (PPA MATOC)
  - Redstone Arsenal 25+MW Cogeneration Heat and Power (Full and Open Competition)
  - Fort Campbell 3.1MW Solar PV (PPA MATOC)
Commercial Utility Program (CUP)

**Overview.** A proven cost saver – 6 to 1 validated return on investment (ROI); CUP lowers Army utility costs by:

- Conducting utility rate interventions
- Negotiating special utility rate contracts
- Providing utility management evaluations and service studies
- Providing Army garrisons with “hotline” to address questions and quickly resolve utility-type issues
- Optimization of renewable energy projects

**Successes and On-Going Activities**

- Rate intervention at Forts Benning, Gordon and Stewart – cost avoidance of $9.3M annually for next three years
- Rate intervention at Fort Polk – cost avoidance of $2.8M over four years
- Utility contract negotiation at Vicksburg District Tensas-Cocodrie Pumping Station – $32K/month electric utility bill savings
ECIP and REM Programs

- **Energy Conservation Investment Program (ECIP)**
  - Army is recognized leader in ECIP validation through CEHNC
  - Provides MILCON dollars for energy projects on military installations
  - CEHNC reviews, validates DD Form 1391s; performs cost estimates, life cycle cost analysis (LCCA), planning charettes, and design reviews
  - Typically executed by Geographic Districts

- **Resource Efficiency Manager (REM) Program**
  - Provides energy expertise in identification and development of energy savings projects
  - REMs have identified more than $135M in potential energy savings and $20M in realized savings for executed projects
  - Added 19 new REMs for 82% growth during FY14
Energy Information Management (EIM)

Integrates enterprise systems and facility assets into automated IA compliant platform.

Proactive Asset Management (Implementation)
Integrate, Analyze, Visualize
Data Collection

Installation

UMCS/EMCS
Electric
Gas
Operations
Logistics
Water
Renewable Energy
Maintenance
Micro-grid
Finding Information on CEHNC Energy Programs

New CEHNC Energy Website

- In process of making more robust
- Will be housed on the CEHNC website
- Increase energy information sharing and exchange to heighten awareness of energy initiatives, available tools, products and services
  - Information on net zero, third party financing, support to USACE Civil Works, and strategic partnerships
  - Find program fact sheets and articles
Energy Acquisition Vehicles

- **ESPC**: $900M MATOC, 15 Energy Service Companies; new ESPC III MATOC with anticipated award 3QFY15
- **UESC**: GSA Area-Wide Contracts, Basic Ordering Agreements (BOA), Agency Master Agreement / Model Agreements
- **PPA**: $7B MATOC and stand alone contracts
- **REM**: $40M IDIQ, 5 companies; being replaced with Blanket Purchase Agree with anticipated award 4QFY15
- **CUP**: $8.5M MATOC, 3 utility consultants
Doing Business With Us

*Stay Alert*

**SOURCES SOUGHT / REQUESTS FOR INFORMATION**

Always respond to announcements on the Federal Business Opportunities website that match with your firm’s capabilities

- Investigate potential subcontracting opportunities with prime contractors:
  - [http://www.hnc.usace.army.mil](http://www.hnc.usace.army.mil)

- More and more of our products and services are being purchased from **General Services Administration (GSA)** schedules
  - [http://www.gsa.gov](http://www.gsa.gov)
Doing Business With Us
Monitor Procurement Advertisements Daily

- Huntsville Center uses formal solicitation procedures and publishes public notices for major program actions, predominately utilizing best value, negotiated procedures.

- All actions over $25,000 are published on the following websites:
  - Federal Business Opportunities (FedBizOpps)
    www.fbo.gov

- Shortcut to the Huntsville “Contract With Us” Site:
Questions

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