Welcome to Energy Programs Business Opportunities

Moderator: Col. Robert Ruch, F.SAME, USA (Ret.), AECOM

Speakers:
- Col. John Hurley, USA, Commander, U.S. Army Engineering & Support Center, Huntsville
- Capt. Jay Murphy, P.E., CEC, USN, Deputy Director, Resilient Energy Program Office, HQ NAVFAC
- Daniel Soto, Chief, Rates & Renewables Division, AFCEC
U.S. ARMY CORPS OF ENGINEERS
Energy Business Opportunities

COL John Hurley
Commander
U.S. Army Engineering and Support Center, Huntsville
16 November 2017

“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.”
Keys to Success

- Integrated, resilient, secure, sustainable and holistic systems approaches and solutions
- A different way of thinking – innovation
- Strategic Partnerships
Energy Portfolio Management
Pathway to Net Zero, Energy Security and Meeting Federal Mandates

Renewable Energy Goals

Execution/Acquisition

Conservation & Reduction Measures

Investigation & Planning

Behavioral Changes

UMCS – Utility Monitoring and Control Systems
ERCIP – Energy Resilience & Conservation Investment Program
UESC – Utility Energy Services Contracting
ESPC – Energy Savings Performance Contracting
EEAP – Energy Engineering Analysis Program

PPA – Power Purchase Agreements
REM – Resource Efficiency Manager
CUP – Commercial Utilities Program
MDMS – Meter Data Management System
FRP – Facilities Reduction Program

US Army Corps of Engineers.
Strategic Partnerships
Third Party Financed Acquisition Support to Federal Government

- Establish framework for partnership and collaboration
- Leverage strengths of both agencies
- Better support federal agencies in meeting energy security & resiliency goals through strategic activities to strengthen ESPC & UESC execution
- Facilitate better education, training and knowledge transfer
- Improve Measurement & Verification (M&V) activities

Memorandum Of Understanding
Between
And
U.S. Army Corps of Engineers (USACE)

Support to USAF – USAF Funded
- Los Angeles AFB, CA
- Hanscom AFB, MA
- Ramstein AFB, Germany
- Travis AFB, CA
- Patrick AFB, FL
- Cape Canaveral AFB, FL
- Dyess AFB, TX

Support to other Federal Agencies
- Los Alamos National Lab, NM
- GSA West, CO, WY
- GSA East, SC, TN, GA
- Princeton Plasma Physics Lab, NJ

Support to USAF – FEMP Funded
- Spangdahlem AB, Germany

MOA Between
U.S. Air Force Civil Engineer Center and CEHNC
3rd Party Financed Acquisition Energy Programs

- **Energy Savings Performance Contracting (ESPC) & Utility Energy Services Contracting (UESC):**
  - HNC’s FY17 cumulative ESPC & UESC capital investment was $236.2M.
  - ESPC utilizes 3rd generation $1.5B ESPC MATOC.
  - UESC utilizes GSA Area-Wide Contracts, Basic Ordering Agreements (BOA), Agency Master Agreement / Model Agreements

- **Power Purchase Agreements (PPA):**
  - HNC supports the Army’s emphasis on energy security and resilience
  - Supports the Army in achieving renewable energy goals with execution via $7B PPA MATOC and stand-alone PPA contracts
    - Support Army’s Office of Energy Initiatives (OEI) and Air Force Office of Energy Assurance (OEA) as acquisition partner:
      - Large scale renewable > 10MW
      - Small scale renewable < 10MW (Support Garrisons/Bases; full administration)
Installation Support Energy Programs

- **Energy Engineering Analysis Program (EEAP):**
  - More than energy audits – energy planning starts here to leverage a strategic energy portfolio that provides comprehensive and sustainable energy solutions to include:
    - Energy security baseline & resilience assessments
    - Energy & water evaluations
    - Project development support
    - Installation energy plans
    - Energy & water master plans
    - Capital investment plans

- **Resource Efficiency Manager (REM):**
  - Provides energy subject matter experts that have repeatedly shown their value to all garrison commands.
  - Hosts annual conferences to empower REMs to use portfolio of Army energy tools available to assist their garrisons. FY17 REM Workshop held at Energy Exchange in Tampa, Florida, in August 2017
  - Provided 23 individual REMs at various locations within CONUS & OCONUS. REM at Fort Irwin was part of the energy planning team that helped identify 7 major energy conservation measures that decreased energy use by 33.2 percent.
  - REM Program utilizes Blanket Purchase Agreement through GSA with $40M capacity and a 5-year ordering period.

The Brigade Combat Team Dining Facility at Fort Bliss, Texas, is powered by solar panels.
Installation Support Energy Programs Continued

- **Commercial Utilities Program (CUP):**
  - Provides substantial cost avoidance and savings through utility consultants, utility company and regulatory agency information, installation data, technical support and expert witnesses to appear before utility commissions in support of rate intervention to oppose utility company rate increases.
  - Provide utility service studies and utility contract review and assessments.
  - FY17 program benefit of $4.2M total cost avoidance and savings over a four year period with return on investment of 14.
  - Utilizes $8.5M MATOC (3 small business companies)

- **Energy Resilience & Conservation Investment Program (ERCIP):**
  - Name change reflects focus on resilience
  - Provides MILCON dollars for energy projects on military installations
  - Army is recognized leader in ERCIP validation through HNC
  - Reviews, validates DD Form 1391s, performs cost estimates, life cycle cost analysis planning charrettes and design reviews
  - Typically executed by Geographic Districts
Installation Support Energy Programs
Continued

- **Utility Monitoring and Control Systems (UMCS):**
  - Provides design, procurement and installation of UMCS solutions including HVAC systems, chiller/boiler systems installation and/or integration, Supervisory Control and Data Acquisition (SCADA) systems, fire alarm and life safety systems, and other Automated Control Systems including chemical / biological / radiological contaminant detection / filtration / response, utilities (electric/ gas/ water/ steam) metering building automation; integrated with UMCS MCX technical support for execution.

- **Army Central Metering Program (AMP):**
  - Installs and integrates all types of meters throughout the Army in direct support of DA EXORD 028-12. Maintains 6 “Type” accreditations for the 5 different Enterprise Data Reporting Systems (EDRS) and for the Meter Management Data System (MDMS). Utilizes MDMS data to track energy uses as well as identify possible issues resulting in excessive consumption. Provides installation Energy Managers with effective tools to identify possible energy/cost reduction efforts.
### NAICS Codes for Energy – Sustainable, Renewable, Energy & Water Reduction

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<td>Biomass electric power generation</td>
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<td>Natural gas distribution (UESC)</td>
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<td>221330</td>
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FY17/18 Energy
Projected Business Opportunities

General Energy and ERCIP

LRD - $1.0 – 3.1M
MVD - $1.8 – 11.9M
NAD - $1.2 – 2.5M
NWD - $1.9 – 8.7M
POD - $30.9 – 155.9M
SAD - $30.2 – 270.2M
SPD - $1.0 – 2.2M
SWD - $2.6 – 20.0M
HNC - $43.4 – 134.0M

3d Party Financed (ESPC, UESC, PPA)

ESPC - $250M
UESC - $100M
PPA - $20M
<table>
<thead>
<tr>
<th>Project Title / Project Description</th>
<th>Project Location (specific)</th>
<th>District Contracting Activity</th>
<th>Type of Work</th>
<th>Estimated Award Range</th>
<th>Anticipated Sources Sought</th>
<th>Set-Aside Category</th>
<th>Anticipated Solicitation Date</th>
<th>Anticipated Award Date</th>
<th>Additional Info</th>
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# NAD Energy Opportunities FY18/19
## Booth 356

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<thead>
<tr>
<th>Project Title / Project Description</th>
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## NWD Energy Opportunities FY18/19
### Booth 224

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<th>Anticipated Award Date</th>
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These projects are representative of upcoming NWD opportunities. For more projects and information, find us online at: nwd.usace.army.mil/Business-With-Us/
On Twitter @NWDUSACE #FedBizOpps #USACE and on Facebook @NWDUSACE
# POD Energy Opportunities FY18/19 Booth 347

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<th>Project Location (specific)</th>
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<td>Japan</td>
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<td>4QFY18</td>
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<td>SAM</td>
<td>Solar Panel Array</td>
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<td>Jun 18</td>
<td>Aug 2018</td>
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<td>Wilmington</td>
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<td>SB</td>
<td>3QFY18</td>
<td>4QFY18</td>
<td>Combined Synopsis/ Solicitation</td>
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<tr>
<td>Herbert Hoover Dike, Water Control Structure Replacement (HP-1)</td>
<td>Glades County, FL</td>
<td>Jacksonville</td>
<td>Civil Construction</td>
<td>$10M - $25M</td>
<td>Unrestricted, Request for Proposal</td>
<td>N/A</td>
<td>3QFY18</td>
<td>4QFY18</td>
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<tr>
<td>Herbert Hoover Dike, Water Control Structure Replacement (HP-5)</td>
<td>Glades County, FL</td>
<td>Jacksonville</td>
<td>Civil Construction</td>
<td>$10M - $25M</td>
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<td>N/A</td>
<td>4QFY18</td>
<td>1QFY19</td>
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<tr>
<td>Biscayne Bay Coastal Wetlands, Phase 1 L-31 Flowway Pump Station S709 and Culverts S-706A, B, C and S-708 (Contract 4)</td>
<td>Miami-Dade County, FL</td>
<td>Jacksonville</td>
<td>Civil Construction</td>
<td>$5M - $10M</td>
<td>TBD (based on market research), Request for Proposal</td>
<td>TBD</td>
<td>TBD/FY19</td>
<td>TBD/FY19</td>
<td></td>
</tr>
</tbody>
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These projects are representative of upcoming opportunities. For more projects and information, please visit USACE District Booths FOR MARKET RESEARCH PURPOSES ONLY
# SPD Energy Opportunities FY18/19

**Booth 744**

<table>
<thead>
<tr>
<th>Project Title / Project Description</th>
<th>Project Location (specific)</th>
<th>District Contracting Activity</th>
<th>Type of Work</th>
<th>Estimated Award Range</th>
<th>Anticipated Sources Sought</th>
<th>Set-Aside Category</th>
<th>Anticipated Solicitation Date</th>
<th>Anticipated Award Date</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability solar panels</td>
<td>Black Butte Lake, CA</td>
<td>SPK</td>
<td>Renewable energy</td>
<td>&lt;$150K</td>
<td>N/A</td>
<td>N/A</td>
<td>TBD</td>
<td>TBD</td>
<td>N/A</td>
</tr>
<tr>
<td>Sustainability solar panels</td>
<td>Buchanan Dam, HV Eastman Lake, CA</td>
<td>SPK</td>
<td>Renewable energy</td>
<td>$150-650K</td>
<td>N/A</td>
<td>N/A</td>
<td>TBD</td>
<td>TBD</td>
<td>N/A</td>
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<tr>
<td>Solar generation system</td>
<td>Hidden Dam, Hensley Lake, CA</td>
<td>SPK</td>
<td>Renewable energy</td>
<td>$150-650K</td>
<td>N/A</td>
<td>N/A</td>
<td>TBD</td>
<td>TBD</td>
<td>N/A</td>
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<tr>
<td>Lighting</td>
<td>Alamo Lake, AZ</td>
<td>SPL</td>
<td>Energy conservation</td>
<td>&lt;$150K</td>
<td>N/A</td>
<td>N/A</td>
<td>TBD</td>
<td>TBD</td>
<td>N/A</td>
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<tr>
<td>Lighting</td>
<td>Painted Rock Dam, AZ</td>
<td>SPL</td>
<td>Energy conservation</td>
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<td>TBD</td>
<td>N/A</td>
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<tr>
<td>HVAC</td>
<td>Dry Creek (Warm Springs) Lake &amp; Channel, CA</td>
<td>SPN</td>
<td>Energy conservation</td>
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<td>N/A</td>
<td>N/A</td>
<td>TBD</td>
<td>TBD</td>
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These projects are representative of upcoming opportunities. For more projects and information, please visit USACE District Booths FOR MARKET RESEARCH PURPOSES ONLY
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<th>Project Title Project Description</th>
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<th>District Contract Activity</th>
<th>Type of Work</th>
<th>Est. Award Range</th>
<th>Anticipated Sources Sought</th>
<th>Set-Aside Category</th>
<th>Anticipated Solicitation Date</th>
<th>Anticipated Award Date</th>
<th>Additional Info</th>
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<tbody>
<tr>
<td>UMCS Integration</td>
<td>Fort Hood, TX</td>
<td>SWF</td>
<td>Controls</td>
<td>$650K-5M</td>
<td></td>
<td></td>
<td>2QFY18</td>
<td>TBD</td>
<td>ERCIP</td>
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<tr>
<td>Energy Efficient Chillers</td>
<td>Fort Polk, LA</td>
<td>SWF</td>
<td>Energy Reduction</td>
<td>$650K-5M</td>
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<td></td>
<td>2QFY18</td>
<td>TBD</td>
<td>ERCIP</td>
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<tr>
<td>Tactical Vehicle Wash Pumps</td>
<td>Fort Hood, TX</td>
<td>SWF</td>
<td>Energy Reduction</td>
<td>$650K-5M</td>
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<td>1QFY19</td>
<td>TBD</td>
<td>ERCIP FY21</td>
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<tr>
<td>Solar Array</td>
<td>Camp Robinson</td>
<td>SWL</td>
<td>Renewable energy</td>
<td>$650K-5M</td>
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<td>2QFY19</td>
<td>TBD</td>
<td>ERCIP</td>
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These projects are representative of upcoming opportunities. For more projects and information, please visit USACE District Booths FOR MARKET RESEARCH PURPOSES ONLY.
### Energy Resilience Conservation Improvement Program (ERCIP) Opportunities FY18/19

<table>
<thead>
<tr>
<th>Project Title / Project Description</th>
<th>Project Location (specific)</th>
<th>District Contracting Activity</th>
<th>NAICS</th>
<th>Type of Work</th>
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<th>Anticipated Solicitation Date</th>
<th>Anticipated Award Date</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install 2MW Solar PV</td>
<td>Tooele Army Depot, UT</td>
<td>SPK</td>
<td>N/A</td>
<td>D/B</td>
<td>$5-$10M</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Jan 18</td>
<td>Booth 744</td>
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<tr>
<td>Install 2MW Solar Array</td>
<td>Dugway Proving Ground, UT</td>
<td>SPK</td>
<td>N/A</td>
<td>D/B</td>
<td>$5-$10M</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Feb 18</td>
<td>Booth 744</td>
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<tr>
<td>Install 2MW Solar Array</td>
<td>Soto Cano Air Base, Honduras</td>
<td>SAM</td>
<td>N/A</td>
<td>D/B</td>
<td>$10M -$50M</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Sep 18</td>
<td>Booth 1033</td>
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<tr>
<td>Install Water Distro Lines, Potable</td>
<td>Ft. Indiantown Gap, PA</td>
<td>NAB</td>
<td>N/A</td>
<td>D/B</td>
<td>$650K-$5M</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Sep 18</td>
<td>Booth 356</td>
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<tr>
<td>Install Combined Heat &amp; Power (CHP)</td>
<td>Ft. Leonard Wood, MO</td>
<td>NWO</td>
<td>N/A</td>
<td>D/B/B</td>
<td>$5M-$10M</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Feb 18</td>
<td>Booth 224</td>
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<tr>
<td>Install Multiple ECMs</td>
<td>88th RSC Arden, MN</td>
<td>NWS</td>
<td>N/A</td>
<td>D/B</td>
<td>$650K-$5M</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Sep 18</td>
<td>Booth 224</td>
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<tr>
<td>Install Wind Turbine</td>
<td>MTC Marseilles, IL</td>
<td>LRL</td>
<td>N/A</td>
<td>D/B/B</td>
<td>$650K-$5M</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>Booth 1046</td>
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<table>
<thead>
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<th>Anticipated Solicitation Date</th>
<th>Anticipated Award Date</th>
<th>Additional Info</th>
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<tbody>
<tr>
<td>Ft. Polk</td>
<td>LA</td>
<td>CEHNC</td>
<td>Metering</td>
<td>$0.5-1.0M</td>
<td>N/A</td>
<td>N/A</td>
<td>Dec 17</td>
<td>Jan18</td>
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<tr>
<td>Ft. Leonard Wood</td>
<td>MO</td>
<td>CEHNC</td>
<td>Metering</td>
<td>$7-8M</td>
<td>N/A</td>
<td>N/A</td>
<td>Jan 18</td>
<td>Mar18</td>
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<tr>
<td>JBLM</td>
<td>WA</td>
<td>CEHNC</td>
<td>Metering</td>
<td>$2-5M</td>
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<td>N/A</td>
<td>Jan 18</td>
<td>Mar18</td>
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</table>

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### Utility Monitoring and Control Systems (UMCS) Opportunities FY18/19

#### Booth 956

<table>
<thead>
<tr>
<th>Project Title / Project Description</th>
<th>Project Location (specific)</th>
<th>District Contracting Activity</th>
<th>Type of Work</th>
<th>Estimated Award Range</th>
<th>Anticipated Sources Sought</th>
<th>Set-Aside Category</th>
<th>Anticipated Solicitation Date</th>
<th>Anticipated Award Date</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace Controls, Boiler &amp; VAVs</td>
<td>Aberdeen Proving Ground</td>
<td>CEHNC</td>
<td>P&amp;I</td>
<td>$650K-5M</td>
<td>N/A</td>
<td>N/A</td>
<td>Mar 18</td>
<td>3QFY18</td>
<td>SAF</td>
</tr>
<tr>
<td>Patrick AFB M&amp;S AFTAC</td>
<td>Patrick AFB</td>
<td>CEHNC</td>
<td>M&amp;S</td>
<td>$650K-5M</td>
<td>N/A</td>
<td>N/A</td>
<td>Sep 17</td>
<td>1QFY18</td>
<td>SAF</td>
</tr>
<tr>
<td>Electrical and Mechanical Upgrades – Leuketina Hall</td>
<td>Fort Gordon</td>
<td>CEHNC</td>
<td>P&amp;I</td>
<td>$5-10M</td>
<td>N/A</td>
<td>N/A</td>
<td>Nov 18</td>
<td>2QFY18</td>
<td>SAF</td>
</tr>
<tr>
<td>Retro-Commissioning for multiple facilities</td>
<td>Minot AFB</td>
<td>CEHNC</td>
<td>P&amp;I</td>
<td>$650K-5M</td>
<td>N/A</td>
<td>N/A</td>
<td>Dec 18</td>
<td>2QFY18</td>
<td>SAF</td>
</tr>
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</table>

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## ESPC MATOC

### Energy Service Companies (ESCOs)

<table>
<thead>
<tr>
<th>Contract Number</th>
<th>ESCO</th>
<th>Primary POC</th>
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<tbody>
<tr>
<td>W912DY-15-D-0039</td>
<td>American Development Institute, LLC</td>
<td>John Rizzo</td>
</tr>
<tr>
<td>W912DY-15-D-0040</td>
<td>AECOM</td>
<td>Annika Moman</td>
</tr>
<tr>
<td>W912DY-15-D-0041</td>
<td>Ameresco, Inc.</td>
<td>Nicole Bulgarino</td>
</tr>
<tr>
<td>W912DY-15-D-0042</td>
<td>Clark Energy Group LLC</td>
<td>Bryon Krug</td>
</tr>
<tr>
<td>W912DY-15-D-0043</td>
<td>Constellation NewEnergy, Inc.</td>
<td>Christopher Abbuehl</td>
</tr>
<tr>
<td>W912DY-15-D-0047</td>
<td>NORESCO, LLC</td>
<td>Natasha Shah</td>
</tr>
<tr>
<td>W912DY-15-D-0051</td>
<td>Southland Energy</td>
<td>Anthony Roner</td>
</tr>
</tbody>
</table>
PPA MATOC Holders

Wind: 13 Companies

- Acciona Energy North America Corporation, Chicago, IL
- Ameresco Inc., Framingham, MA
- Cobra Industrial Services Inc., Houston, TX
- Dominion Energy Inc., Richmond, VA
- EDF Renewable Energy, San Diego, CA
- Emerald Infrastructure, San Antonio, TX
- Enel Green Power North America, Andover, MA
- EverPower Wind Holdings Inc., Pittsburgh, PA
- New Generation Power Inc., Chicago, IL
- Siemens Government Technologies Inc., Riverside, CA
- Turn Key Power Consortium LLC, Orlando, FL

Biomass: 12 Companies

- Acciona Energy North America Corporation, Chicago, IL
- Ameresco Inc., Framingham, MA
- ECC Renewables LLC, Burlingame, CA
- EDF Renewable Energy, San Diego, CA
- Energy Answers International Inc., Albany, NY
- Energy Systems Group LLC, Newburgh, IN
- Honeywell International Inc., Golden Valley, MN
- MidAmerican/Clark JV, Bethesda, MD
- New Generation Power Inc., Chicago, IL
- Pacolet Milliken Enterprises Inc., Spartanburg, SC
- Siemens Government Technologies Inc., Arlington, VA
- Stronghold Engineering Inc., Riverside, CA
- TransGen Energy Inc., Rockville, MD
- Wheelabrator Technologies, Hampden, NH

Solar: 37 Companies

- Acciona Energy North America Corporation, Chicago, IL
- AES Distributed Energy Co., Boulder, CO
- ABM Government Services LLC, Hopkinsville, KY
- Ameresco Inc., Framingham, MA
- Apex Wind Energy Holdings LLC, Charlottesville, VA
- Bay Electric Company Inc., Newport News, VA
- BITHENERGY Inc., Baltimore, MD
- Bright Light Federal LLC, Littleton, CO
- Chevron Energy Solutions Company, San Francisco, CA
- Cobra Industrial Services Inc., Houston, TX
- Constellation NewEnergy Inc., Baltimore, MD
- Distributed Sun LLC, Washington, DC
- Dominion Energy Inc., Richmond, VA
- Ecoplexus, San Francisco, CA
- EDF Renewable Energy, San Diego, CA
- Emerald Infrastructure, San Antonio, TX
- Enel Green Power North America, Andover, MA
- Energy Matters LLC, Arlington, VA
- Energy Ventures LLC, Rockville, MD
- First Solar Development Inc., San Francisco, CA
- Gehrlicher Solar America Corporation, Springfield, NJ
- Indian Energy LLC, Newport Beach, CA
- Johnson Controls Government Systems, Milwaukee, WI
- Legatus6 LLC, Chevy Chase, MD
- New Generation Power, Chicago, IL
- Photon Finance LLC – SunPower, Mountain View, CA
- RE Independencia LLC, San Francisco, CA
- Siemens Government Technologies Inc., Arlington, VA
- Solar Power Ventures, Arlington, VA
- Standard Solar, Inc., Rockville, MD
- SunLight General Capital LLC, New York, NY
- Sunpower Corporation, Richmond, CA
- Third Sun Solar LLC, Athens, OH
- TransGen Energy Inc., Rockville, MD
- WGL Energy Systems Inc., McLean, VA

Geothermal: 5 Companies

- Constellation NewEnergy Inc., Baltimore, MD
- ECC Renewables LLC, Burlingame, CA
- Enel Green Power North America Inc., Andover, MA
- New Generation Power Inc., Chicago, IL
- Siemens Government Technologies Inc., Arlington, VA

Denotes Small Business
# UMCS/Metering Contract Holders

## UMCS IV Unrestricted

<table>
<thead>
<tr>
<th>Size</th>
<th>Contract Number</th>
<th>Company Name</th>
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<tbody>
<tr>
<td>Large</td>
<td>W912DY-14-D-0050</td>
<td>Johnson Controls Building Automation Sys</td>
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<tr>
<td>Large</td>
<td>W912DY-14-D-0052</td>
<td>Exp Federal Inc.</td>
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<tr>
<td>Large</td>
<td>W912DY-15-D-0003</td>
<td>Eaton Corporation</td>
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<td>W912DY-15-D-0004</td>
<td>Honeywell Technology Solutions, Inc.</td>
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<td>Large</td>
<td>W912DY-15-D-0005</td>
<td>Schneider Electric Buildings Americas</td>
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<tr>
<td>Large</td>
<td>W912DY-15-D-0006</td>
<td>Siemens Government Technologies Inc.</td>
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<tr>
<td>Large</td>
<td>W912DY-15-D-0007</td>
<td>Secure Mission Solutions LLC</td>
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## UMCS IV Restricted

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<tr>
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<td>W912DY-14-D-0051</td>
<td>Evergreen Fire Alarm, LLC</td>
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<tr>
<td>Small</td>
<td>W912DY-15-D-0010</td>
<td>Infotec Systems Corporation</td>
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<tr>
<td>Small</td>
<td>W912DY-15-D-0011</td>
<td>SEI Group, Inc.</td>
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<tr>
<td>Small</td>
<td>W912DY-15-D-0012</td>
<td>Spectrum Solutions, Inc.</td>
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# UMCS/Metering Contract Holders

## UMCS SATOC

<table>
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<td>W912DY-16-D-0001</td>
<td>Siemens Government Technologies Inc.</td>
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## TPSS Unrestricted

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<td>W912DY-15-D-0084</td>
<td>URS Group, Inc.</td>
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<td>Large</td>
<td>W912DY-15-D-0085</td>
<td>Spectrum Solutions, Inc.</td>
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<td>Large</td>
<td>W912DY-15-D-0087</td>
<td>M.C. Dean, Inc.</td>
</tr>
<tr>
<td>Large</td>
<td>W912DY-15-D-0088</td>
<td>Jacobs Project Management Company</td>
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## TPSS Restricted

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<thead>
<tr>
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<th>Contract Number</th>
<th>Company Name</th>
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</table>
## CUP MATOC Holders

<table>
<thead>
<tr>
<th>Company</th>
<th>Point of contact</th>
<th>Phone</th>
<th>Email</th>
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</thead>
<tbody>
<tr>
<td>BAI (Brubaker &amp; Associates, Inc.)</td>
<td>Brubaker, Maurice</td>
<td>(636) 898-6725</td>
<td><a href="mailto:mbrubaker@consultbai.com">mbrubaker@consultbai.com</a></td>
</tr>
<tr>
<td>Exeter Associates, Inc.</td>
<td>Christina Mudd</td>
<td>(410) 992-7500</td>
<td><a href="mailto:cmudd@exeterassociates.com">cmudd@exeterassociates.com</a></td>
</tr>
<tr>
<td>NewGen Strategies and Solutions, LLC</td>
<td>Joe Mancinelli</td>
<td>(720) 633-9509</td>
<td><a href="mailto:JMancinelli@newgenstrategies.net">JMancinelli@newgenstrategies.net</a></td>
</tr>
</tbody>
</table>
General Takeaways

- Investments in energy is a growing business in the federal government with a focus on resilience and security.

- Essentially managing the execution of Army’s energy program portfolio (exception OEI) to provide innovative, sustainable and holistic solutions.

- USACE is a leader in the energy effort supporting the Army and beyond.

- Continue to develop and expand strategic partnerships to better support the Army and Nation.
Small Business Resources

Federal Business Opportunities
SBA Learning Center. The U.S. Small Business Administration.
SBA District Offices
Size Standard Tools
Women-Owned Small Businesses
Office of Small & Disadvantaged Business Utilization
SBA 8(a) Business Development Program
HubZone Program
Service-Disabled Veteran-Owned Businesses
Procurement Technical Assistance Program
System for Award Management
Dynamic Small Business Search Database
USA Spending.gov Web Site
Small Business Loan
SB Outreach Events
North American Industry Classification System (NAICS)
Obtaining a DUNS Number
Huntsville Center Main Web Site
USACE Huntsville Small Business Web Site
USACE Huntsville Contracting Web Site
Small Business -- Headquarters U.S. Army Corps of Engineers
Information About Upcoming Opportunities

- Federal Business Opportunities (www.fbo.com)
- Small Business Conferences
- Announcements of Business Opportunity Conferences, Trade Fairs and other federally attended or sponsored liaison meetings in your area
- Corps of Engineers Division, District and Laboratory websites
Thank You!!!
Energy Resiliency in Support of the Mission

CAPT Jay Murphy
Deputy Director, Naval Facilities Engineering Command Resilient Energy Program Office

16 Nov 2017
"Our access to and use of energy must continue to be secure, reliable, and resilient... we must realize the shore is an integral part of this equation since it serves as the backbone from which our forces fly, sail, submerge, and communicate."

- ADM John Richardson, Chief of Naval Operations
Energy Security Framework

Energy Security

Reliability

Staying online

Resiliency

Recovering from a disturbance

Efficiency

Using the minimal amount of energy needed
Marine Corps Air Station Yuma

• Installation Mission: Provide aviation ranges, support facilities and services that enable forces to enhance their mission capabilities and combat readiness

• Project Summary:
  – Diesel Generator Peaker Plant and Microgrid
  – 25 MW
  – Arizona Public Service
Project Execution

DON exceeded the PPCC Goal of $570M:
- Awarded a total of 39 projects with a capital investment value of $654M

DON total expected savings:
- Annual Savings – $52M
- Annual Energy Savings – 2.3 trillion BTUs
- Annual Water Savings – 243 million Gals

Advanced energy security posture via outgrants:
- 700MW / $1.3B of privately funded generation and microgrid assets
- $140M dedicated DON exclusive infrastructure upgrades including:
  - distributed generation, smart inverters, redundant and/or express feeders, switchgear, transformers

Leadership Alignment, Bankable Contract Terms, Effective Templates, Reliable Industry Partner, Staff Experience
Project Development

Identify Problems: Gap Analysis
- Utilize multiple inputs to compare energy requirements versus current state to identify energy needs
- Create prioritized list of requirements based on energy needs identified in Gap Analysis

Identify Solutions: REPO Analysis
- Assess information from prioritized requirements list in conjunction with market information
- Identify opportunities and solutions to respond to requirements

Select Solutions: Installation Energy Plans
- Use REPO solutions to break large scope into single projects, using all energy tools available (REPO Models 1-3, ESPC/UESC, etc.)
- Submit requested projects to EMIG

Select prioritized and funded projects: EMIG process
- Installations submit annual project execution request to NAVFAC
- EMIG identifies projects which are planned, prioritized, and funded, to create future project execution pipeline
Energy Security Assessment Tool

- Data-driven mechanism to assess and analyze installation energy system performance against energy benchmarks and mission requirements
  - Is the installation energy efficient?
  - Is the installation’s electric service reliable?
  - Are backup generation requirements met?

- Outcomes
  - Energy Security Framework gap analysis
  - Scalable Scorecard
  - Identification of installation level Key Performance Indicators
  - Holistic enterprise-wide performance data
Installation Mission: The world's largest instrumented, multi-dimensional testing and training missile range.

Project Summary:
- Solar Generation with Integrated Storage
- 19 MW generation and 60 MWh energy storage
- Kauai Island Utility Cooperative
Naval Submarine Base New London

- Installation Mission: As the DON’s primary East Coast submarine base, provide infrastructure for Navy operating forces and is homeport to 5 attack submarines

- Project Summary:
  - Fuel Cell and Microgrid
  - 7.4 MW
  - Partners Connecticut Municipal Electric Energy Cooperative (CMEEC), Groton Utilities and the state of Connecticut
ESPC at Guantanamo Bay

Whole Base Solution

- **Peak Demand**
  - ~20.3MW pre
  - ~17.5MW post

- **2 MW PV with ESS**
- **PP3 Diesel Gensets**
- **Guantanamo Bay**
  - Cross-bay power and fiber optic cables are existing
- **Plant Control System**
- **CCPP**
- **PP4 Diesel Gensets**
  - 6 x 3.5 MW
- **PV**
  - 0.965 MW (Facility)
- **Wind**
  - 4 x 0.95 MW

Existing Generation (to remain)
Thank You!
Air Force Civil Engineer Center

Energy Program Update

Dan Soto, P.E.
AFCEC/CN
16 Nov 17
Purpose

Provide Program Update

Seek Industry Input & Assistance on Air Force Energy Program Issues & Concerns
Overview

- AFCEC Energy Information
- Current Issues
- Future Concerns
- Q & A
Organizational Fit

- Air Force Chief of Staff
- Air Force Materiel Command
- Air Force Installation and Mission Support Center
- Air Force Civil Engineer Center
AFIMSC ORGANIZATION

Air Force Installation and Mission Support Center Organization

Director of Staff-DS
Col Kurt Bergo

Vice Commander-CV
Col Gregory Reese

Commander-CC
Maj Gen Bradley Spacy

Mobilization Asst-MA
Brig Gen Linda Marsh

Command Chief
Master Sergeant-CCC
CMSSgt Jose Lugo Santiago

Commander’s Action Group-CAG
Lt Col Horst Knorrekk

Section
Commander CCQ
Maj Austin Pruneda

Personnel-DP
Ms. Jill Stringer

Judge Advocate-1A
Col Marlesa Scott

Public Affairs-PA
Mr. Michael Briggs

Inspector General-IG
Col Douglas Swift

Information Protection-IP
Mr. John Howe

Safety-SE
Mr. Richard Garrett

Small Business-SB
Ms. Mary Urey

AF Civil Engineer
Center AFEC
Mr. Randy Brown

AF Financial
Management Center of Expertise-FM COE
Mr. Rick Clugston

AF Installation
Contracting
Agency AFICA
Brig Gen Cameron Holt

AF Security Forces Center- AFSEC
Col Brian Greenwood

AF Services Activity-AFSVA
Col Donna Turner

AF Financial Services Center- AFSFC
Mr. Gary Guanana

Detachment 1
(AFSPC)
Col Anthony Romage

Detachment 2
(PACAF)
Col Michael Addison

Detachment 3
(AFSC)
Col Travis Harsha

Detachment 4
(USAFE)
Col Steven Sweeney

Detachment 5
(AFDW)
Col Don Layne

Detachment 6
(AFMC)
Col Shawn Moore

Detachment 7
(AETC)
Col Brian Murphy

Detachment 8
(ACC)
Col Russell Hula

Detachment 9
(AMC)
Col James Kossler

Detachment 10
(AFSC)
Col Wade Lawrence

Operations Support-1ZS
Col Robert Boys

Plans and Analysis-1ZP
Col Marc VanDeever

Protection Services-1ZP
Col Thomas Sherman

Training and Support-1ZT
Col Robert Snodgrass

Readiness-1ZXR
Lt Col Kirk Peterson

Installation Support Directorate-1Z
Col Andrea Doupstokke

Installation Support Directorate-1Z
Mr. David Dentino

Installation Engineering-1ZB
Col Andrea Doupstokke

Financial Mgmt-1ZMF
Col Larry Rice Jr.

Plans and Programs-1ZMP
Ms. Alison Overbay

Resources Directorate-RM
Ms. Monica Anderson

Special Staff

27 Jul 16
AFCEC Organization

Planning and Integration Directorate
- Strategic enterprise wide planning
- Enterprise-wide output standards
- AFCAMP Investment Plan – IPLS (Budget year) development / integration
- AFAMP Investment Plan (POM) development
- Enterprise procurement

Installations Directorate
- AF real estate (RE) management
- RE development (value-based & third party financed, REPI leases, GSA leases)
- Housing Portfolio mgmt.
- Utilities Privatization Program mgmt.
- Base Realignment and Closure (BRAC) Program

Facility Engineering Directorate
- Centralized Design & Construction services for MILCON and O&M funded projects
- Standardized designs for similar facility and infrastructure
- Expertise in all facility construction

Environmental Directorate
- Planning, program and project validation, prioritization, strategy, technical support & execution for:
  - Compliance
  - Restoration
  - Natural and Cultural Resources
  - NEPA Center
  - Leg and Reg Engage

Operations Directorate
- Facility ops analysis
- Standardization support & assessments
- Preventative maint.
- Asset Visibility
- Engineer SMEs
- Enlisted FDM
- Airfield pavement evaluations & CE Maint, Inspection & Repair Teams

Energy Directorate
- Facility energy and utility rate negotiation support
- Energy opportunity clearinghouse
- Renewable energy focal point
- Centralized ESPC/UESC program mgmt
- Advanced meter reading systems
- CE RDT&E

Readiness Directorate
- PRIME BEEF, RED HORSE, Expeditionary Engineering, Fire, EOD, and Emergency Mgmt
- AF Contract Augmentation Program (AFCAP) support
- Reach-back center support
- CE RDT&E
Energy Directorate

Mission

*Leading the way in delivering Air Force installation energy assurance*

Roles & Responsibilities

- Legacy focus: conservation and compliance
- New focus: delivering mission driven energy solutions

Developing new capabilities to:

- Integrate disparate energy data collected across AFIMSC enterprise (data analysis)
- Ensure data collection supports Air Force common operating picture (i.e., data availability)
- Test and evaluate mission readiness through planned outages and recovery efforts
- Derive actionable data and lessons learned to tailor energy investments for maximal mission impact
Current Issues

• Business Case for Resiliency
  – Resiliency usually costs more
  – Mission assurance can be intangible

• Cybersecurity
  – Reconciling industry standards with AF standards
  – Only AF-owned equipment on AF network

• Operation & Maintenance of new technology
  – AF prefers industry own & operate “new” tech
  – Exacerbated by cybersecurity issues above
Future Concerns

• Contractors at the appropriate security level
  – Energy & Mission Assurance challenging arena
  – Looking for cost effective solutions
• Ability to adopt emerging technology
  – Fielding technology without introducing more risk
  – Working closer with industry and academia
Questions

Have questions/comments on Energy?

AFCEC/CN POCs (Comm: (850) 283-xxxx, DSN 523)
- Director, Mr. Robert Gill, x6341
- Deputy Director, Maj Josh Aldred, x6867
- Program Development Chief, Mr. Les Martin, x6238
- Analysis Chief, Mr. Paul Carnley, x6222
- Rates/Renewables Chief, Mr. Dan Soto, x6357
- AMRS Chief, Mr. Dan Gerdes, x3150
Q&A & FEEDBACK

Please walk up to the mic for questions. Questions will be addressed during the allotted time. Rate our session in the SBC App.