



FUPWG Spring Seminar Washington Update

April 12, 2017

Schuyler Schell

Procurement Services

Federal Energy Management Program

Agenda: FEMP Washington Update

- Transition at FEMP
- Energy Legislation and Budget
- Performance Contracting Success
- Future is Bright for UESCs
- DOE IDIQ Contract Update
- Deep Energy Retrofits
- FEMP/NASA Partnership
- Energy Exchange Update



FEMP Leadership and Transition

- Tim Unruh is now DAS for Renewable Power
- Leslie Nicholls is our Acting FEMP Director
- FEMP Transition Organizational Focus
 - Performance Contracting and Renewable Energy
 - Federal Building Performance Optimization
 - Federal Energy Resiliency
 - Federal Leadership and Engagement



Strategic Leadership Elements and Framework for Success

Workforce Service (People & Policy)

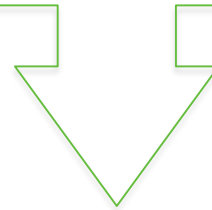
- ✓ Interagency Coordination & Communication
- ✓ Data Management
- ✓ Facility Guidance
- ✓ Workforce Development

Technical Service (Technology & Tools)

- ✓ Renewable and Infrastructure Development
- ✓ Campus & Base Management
- ✓ Agency Resiliency
- ✓ Security Integration

Procurement Service (Financing & Projects)

- ✓ Performance Contracting and Assistance
- ✓ Strategic Technical Assistance
- ✓ Focus on Performance and ROI



- Lead by Example – Reduction in Federal Footprint
- Facilitate Success and Best Practices
- Enable Sound Technology Investments
- Enhance Transparency and Accountability
- Provide Guidance and Foster Stakeholder Engagement

Energy Legislation Under Consideration

S.190	To provide for consideration of the extension under the Energy Policy and Conservation Act of non-application of No-Load Mode energy efficiency standards to certain security or life safety alarms or surveillance systems, and for other purposes.
S.226	To exclude power supply circuits, drivers, and devices designed to be connected to, and power, light-emitting diodes or organic light-emitting diodes providing illumination or ceiling fans using direct current motors from energy conservation standards for external power supplies.
S.239	To amend the National Energy Conservation Policy Act to encourage the increased use of performance contracting in federal facilities, and for other purposes.
S.385	To promote energy savings in residential buildings and industry, and for other purposes.

Some “Shalls” and “Shall Nots” from S.239

- Federal Agencies Shall

“(4) IMPLEMENTATION OF IDENTIFIED ENERGY AND WATER EFFICIENCY MEASURES.—Not later than 2 years after the completion of each evaluation under paragraph (3), each energy manager may (now shall)—“(A) implement any energy- or water-saving measure that the Federal agency identified in the evaluation conducted under paragraph (3) that is life cycle cost-effective; and“(B) bundle individual measures of varying paybacks together into combined projects.

- Federal Agencies Shall Not:

“(iii) limit the recognition of operation and maintenance savings associated with systems modernized or replaced with the implementation of energy conservation measures, water conservation measures, or any combination of energy conservation measures and water conservation measures.”

Administration FY 18 Budget Proposal*

- Emphasis on national security and public safety
 - Large increase in defense spending
 - Increases for immigration enforcement
 - Increases to address violent crime and drug use
- Other Government agencies will receive cuts and will need to achieve greater efficiency and eliminate wasteful spending
- DOE in the 2018 budget request:
 - A 5.6% decrease from the 2017 annualized CR level
 - NNSA increases 11%
 - EERE and other offices provided a request with a collective reduction of approximately \$2B
- Next Stop: Congress

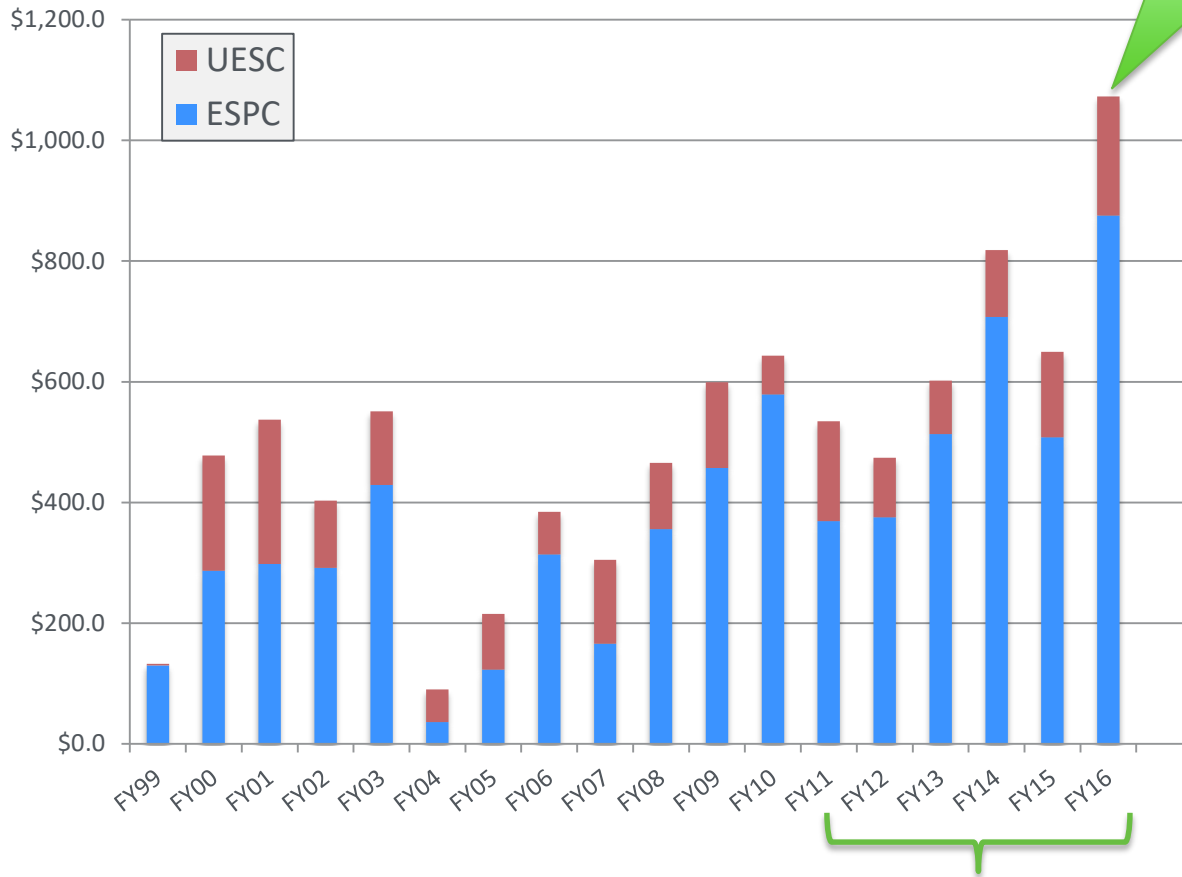
*Source:https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/2018_blueprint.pdf

Administration Executive Orders

- Action was taken by the new Administration on a number of executive orders
- EO 13693, Planning for Federal Sustainability was not part of the actions to date (Issued 19 March 2015)
- Goals currently still in place:
 - Energy efficiency: reduce intensity by 2.5% per year thru 2025
 - Clean energy: 25% by 2025
 - Renewable energy: 30% of electricity consumed by 2025
 - Potable water: 36% reduction by 2025
 - Industrial, landscaping, and agricultural water: reduce 2% annually by 2025
 - Fleet GHG: reduce by 30% by 2025

The Best Year, The Best Quarter... A Record Breaking Success!

Performance Contracting Federal Awards (FY99 - FY16)



First year over \$1B

Contract Vehicle	FY 16 Award (\$M)
DOE IDIQ	\$719
UESC	\$197
USACE MATOC ESPC	143
ENABLE ESPC	\$8
Other ESPC	\$5
Total:	\$1072

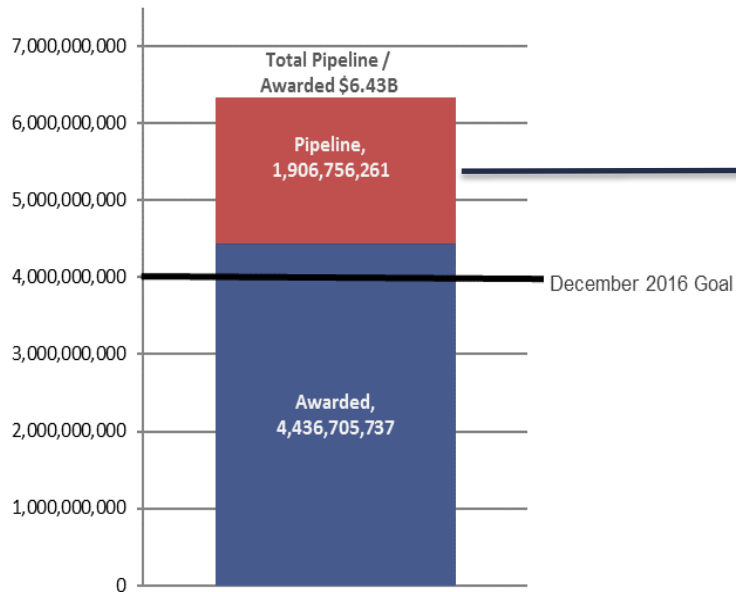
Cumulative Investment
Since 1999: \$9 billion

PPCC met the \$4B goal on 12/13/16

Award Goal Exceeded! Pipeline can Maintain the Record Pace

In 2011, the federal government committed to creating \$2B worth of energy performance contracts for federal facilities. In 2014, the goal was doubled to \$4B by December 2016. The Federal government surpassed the goal by \$437 million as of December 31, 2016. Projects in pipeline position USG to maintain the \$2B/3 year pace of past several years.

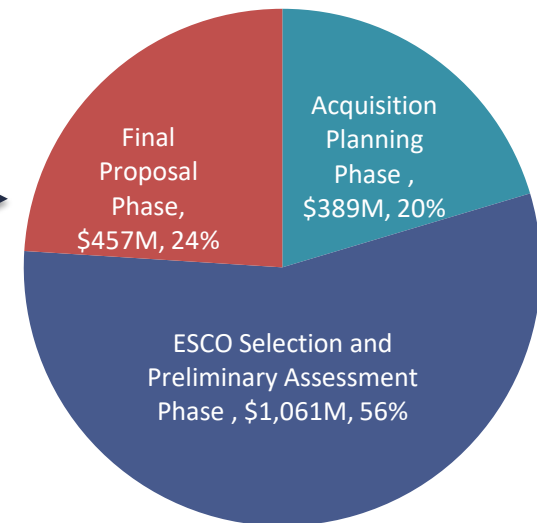
Dollar Value of Projects Awarded and in Pipeline since 2011



Pipeline: Amount of project costs in procurement process and expected to award.

Awarded: Amount of project costs awarded.

Status of Projects in the Pipeline



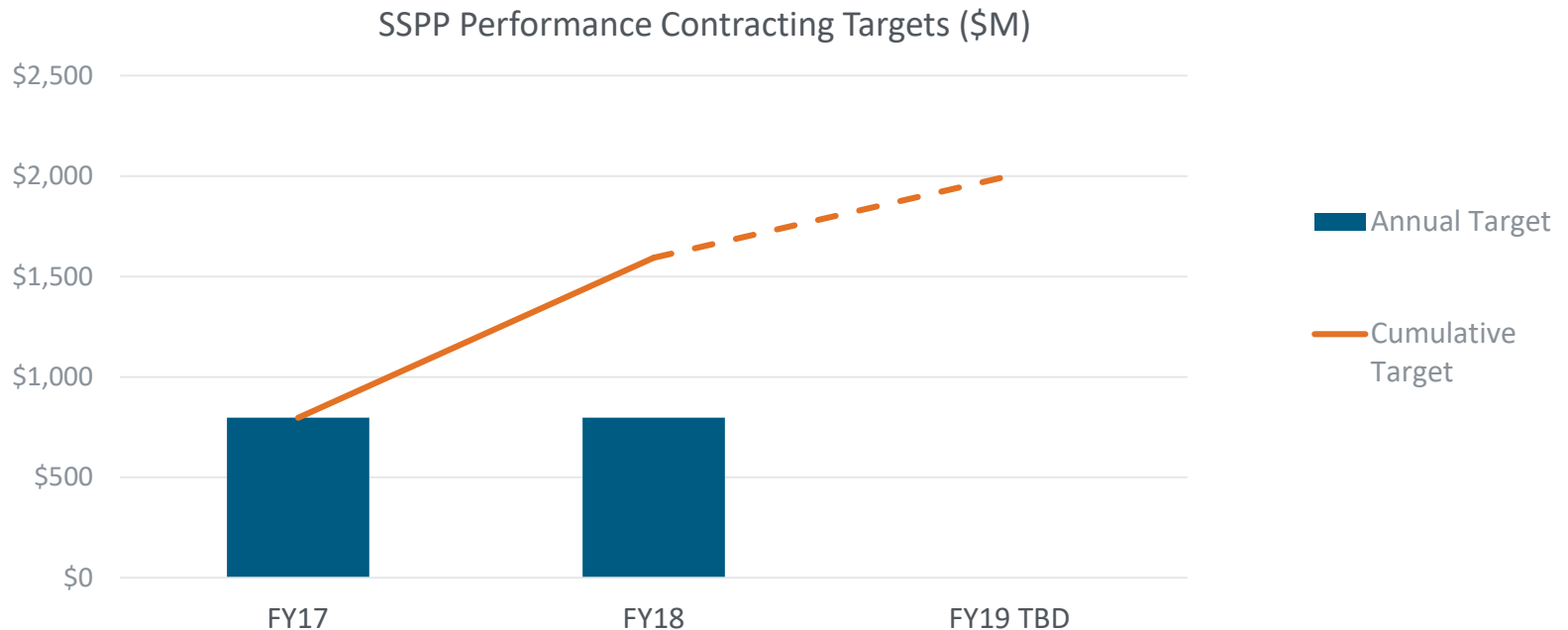
Acquisition Planning Phase: Projects in the process of acquisition; Completion of agency's acquisition; and Release of the Notice of Opportunity to perform a performance contract.

ESCO Selection Phase: Selection of the Energy Service Company that will perform the work; and Review of the Preliminary Assessment outlining the work to be completed.

Final Proposal Phase: Issuance of the Notice of Intent to Award the contract; Review of the Investment Grade Audit and cost/savings proposal; and Review of the Final Proposal

A Positive Forecast for ESPC/UESC

- Agencies provided FY 2017 and FY 2018 targets in 2016 Strategic Sustainability Performance Plans
- Targets consistent with a pace of \$2B over 3 years
- Agencies will provide a new two year forecast every year



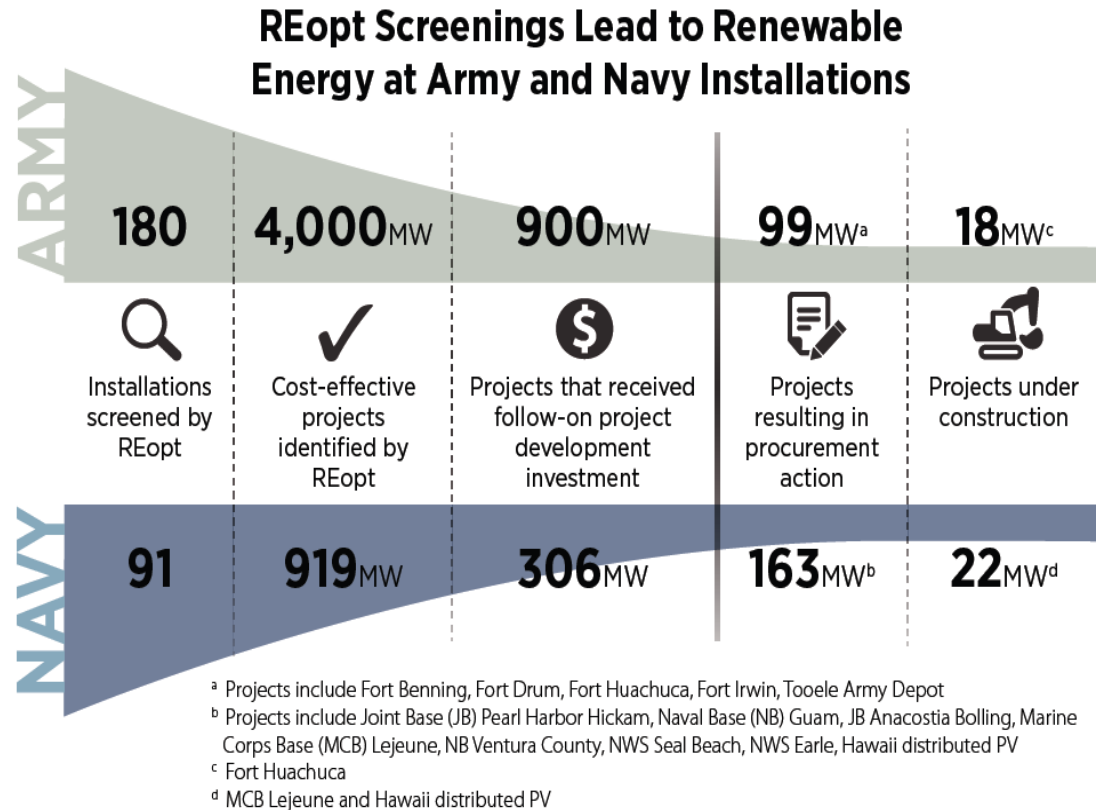
Recent Emphasis: Deep Energy Retrofit (DER) Projects

- GSA and others have increased emphasis on DER: Double project savings from 19% to at least 38%
- Make your objectives clear
- Project savings of >50% can be achieved by:
 - Bundling ECMs
 - Leveraging appropriations
 - Including Renewables
 - Including building envelope measures

DER “Core Technologies” Bundle	
Building Envelope	Insulation: roof, walls, slab
	Improved windows
	Doors – insulated, weather-stripped, vestibules and air barriers
	Remediate thermal bridges
	Air tightness
	Vapor barrier
	Building envelope quality assurance
Lighting & Electrical	Lighting design & technologies (daylighting, LED, task lighting, etc.)
	Controls
HVAC	High performance motors & fans
	High performance chillers & boilers
	Variable speed drives for pumping & ventilation
	Dedicated Outdoor Air Systems (DOAS)
	Duct insulation & air tightness
	Pipe insulation

Recent Emphasis: Finding Best RE Opportunities for the USG

- FEMP utilizes NREL’s ReOpt energy planning platform to quickly and efficiently screen and prioritize potential RE opportunities at a single site or across a wide portfolio of sites.
- FEMP supports federal agencies throughout the entire RE project implementation process including project validation, development of technical specifications, and evaluation of procurement options.



- For FEMP RE project assistance: <https://energy.gov/eere/femp/federal-renewable-energy-project-assistance> or contact rachel.shepherd@ee.doe.gov
- To learn more about NREL’s ReOpt: http://www.nrel.gov/tech_deployment/tools_reopt.html

Other Areas of Emphasis

- Broad use of eProject Builder for both ESPCs and UESCs
- All Performance Contracts have a robust M&V or Performance Assurance Plan, to ensure that these paid from savings programs are, indeed, paid from savings
- All Federal project managers put excellent performance contracts in place and manage them well over the contract term
- ESCOs and Utilities will strive to achieve highly competitive pricing for USG performance contracts
- Agencies and Contractors are familiar with and utilize FEMP Guidance
 - O&M Savings
 - M&V and Performance Assurance
 - FAQs

Future Emphasis: Priorities in the Coming Year

Look for opportunities for Performance Contracting to make an impact:

- Infrastructure investment, job creation, contribute to American Manufacturing, waste reduction
- Making the Federal Government more efficient
 - Achieve Federal Energy Efficiency, Renewable Energy and Water goals
 - Explore space saving opportunities, efficient data centers, and other new or expanded uses.
- Making Federal sites more secure and resilient
 - CHP, Renewables, Energy Storage
 - Micro-grids
 - Load Reduction

FEMP Workforce Development Programming

The **Federal Energy Management Program (FEMP)** provides workforce development services to foster and maintain a high-performance workforce to construct, operate, and maintain facilities in an energy-efficient and cost-effective manner.

FEMP Workforce Development Support

FEMP Training Program

Federal Workforce Support

eTraining Offerings

Live & Webinar Training

Onsite Training

Energy Exchange

FEMP Awards

Veterans Intern Program

The Flagship Sets Sail in August



TRAINING & TRADE SHOW
AUGUST 15-17, 2017
Tampa Convention Center
Tampa, Florida
femp.energy.gov/energyexchange

Example Leading-Edge Training Sessions:

- **Innovative Building Management Best Practices**
- **Designing Resiliency into Buildings and Campuses**
- **Energy Technology and Building Systems Security**
- **Advanced Fleet Guidance**
- **Integrated Master Planning**
- **Performance Contracting Strategies**
- **Key Updates to Federal Energy Policies and Legislation**
- **Emerging and High Performance Technologies**

CEUs : Continuing education units (CEUs) will be available for designated training sessions

Utility Related Sessions* at the 2017 Energy Exchange

- Engaging your utility partner
- The future of utility procurement
- Utility incentives for demand response and energy efficiency
- Federal utility partnership: what the government needs from the utility and what the utility needs from the government
- Utility partnership: helping the agency meet their renewable energy goals
- Selecting a contracting vehicle
- Government perspectives on alternative contracts
- Private sector perspectives on alternative contracts
- Creative financing and contracting case studies

*From the latest draft program matrix: likely subject to change in content and title...

Energy Exchange Fees, Contacts and “Early Bird” Dates

Attendee Registration	
<i>Current rates increase after June 16</i>	
Speaker	\$100
Federal Employees & National Labs	\$250 <i>\$295 after June 16</i>
Private Sector & Gov.’t Contractors	\$395 <i>\$450 after June 16</i>

Trade Show Exhibitors	
10’x10’ Booth	\$2,995 <i>Includes 2 full registrations</i>
20’x20’ Booth	\$13,500 <i>Includes 4 full registrations</i>
20’x30’ Booth	\$17,500 <i>Includes 6 full registrations</i>

Energy Exchange 2017 WEBSITE & CONTACTS

- Session info., register, hotel info, & trade show info: <http://energy.gov/eere/femp/energy-exchange>
- General Inquiries: EnergyExchangeInfo@ee.doe.gov
- Registration Inquiries: [Anne Phillips, aPhillips@mc-2.com](mailto:aphillips@mc-2.com)
- Trade Show: [Diane Manuel, dmanuel@mc-2.com](mailto:dmanuel@mc-2.com)

QUESTIONS?

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