Demonstration Projects and UESCs
Environmental Security Technology Certification Program (ESTCP)

Hosted by:
FEMP
Federal Energy Management Program

PSE
Puget Sound Energy
Outline

• Overview of ESTCP
• Integrating Demonstration Projects w/UESCs
About ESTCP

• Established in 1995 to:
  – Improve DoD’s environmental performance
  – Reduce costs
  – Enhance and sustain mission capabilities

• Demonstration & validation focus

• Promote Implementation

• Energy & Water is one of five ESTCP Program Areas

• ~ $20M annual budget for EW
Energy and Water

• Smart and secure installation energy management
  – Microgrids
  – Energy storage
  – Ancillary service markets

• Efficient integrated buildings and components
  – Design, retrofit, operate
  – Enterprise optimized investment
  – Advanced components
  – Intelligent building management
  – Non-invasive energy audits

• Distributed generation
  – Cost effective
  – On-site
  – Emphasis on renewables
Smart and Secure Installation Energy Management Projects
(Microgrid-Energy Storage-Demand Response/Ancillary Services)

29 Projects
Efficient Integrated Buildings Projects
(Advanced Components, Controls, Design, Optimized Investment, Water)

86 Projects
Distributed Generation Projects

13 Projects

Solar
Biomass
Geothermal
Waste to Energy
Waste Heat Recovery
## Annual Solicitation Cycle

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<thead>
<tr>
<th>Project Start</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
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<td>FY17 Topics Released</td>
<td>Pre-Proposals Received</td>
<td>Pre-Proposals Reviewed &amp; Selected</td>
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<td>Selection Meeting</td>
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<td>FY18 Topics Discussed</td>
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Note: The chart illustrates the timeline for the Annual Solicitation Cycle, with key milestones listed for each month.
Demonstration Process

1. Demonstration Site
2. Formal Demonstration Plan
   - Approval
3. Demonstration
   - Baseline, Installation, Data acquisition
4. Reporting
   - Final Report, Cost & Performance Report
Disposition of Equipment

• Remove and replace to pre-demonstration condition
• Abandon in place
☆ Transfer property to installation for ongoing operation
Benefits of Integration with UESCs

• Continued operations of Installed technology.

• Utilities/ESCOs gain experience with new technology.

• Efficient project execution - Increase performance and cost data collection.

• Direct example for future UESC applications.
What’s Next?

• ESTCP Program Office seeking feedback
  – Utilities, ESCOs, Energy/Facility Managers
    • Solicitation mechanics/timing, provision of O&M, solicitation topic recommendations etc.

• Develop solicitation documents
  – Guidance documents
  – Technology topic(s)

• ESTCP Director Approval
Contact Info

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