Financing Distributed Energy



Distributed Energy Implementation Options

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Agenda

- I. Distributed Energy Project Implementation Options
- II. ESPC Energy Sales Agreement Update
- III. FEMP Resources



Distributed Energy Projects with Government Ownership

Distributed
Energy Projects
with
Government
Ownership



Appropriations

 Agencies with appropriations can pay directly for distributed energy projects

Project Financing

- No up-front capital costs required for the equipment
- Include distributed energy conservation measures (ECMs) within:
 - Energy Savings Performance Contracts (ESPCs)
 - o **ESPC ENABLE**
 - Utility Energy Service Contracts (UESCs)

Distributed Energy Projects with Private Ownership

Distributed Energy Projects with <u>Private</u> Ownership



Power Purchase Agreements

- Agency hosts privately owned and operated distributed energy project
- Agency purchases the electricity

Real Property Arrangement

- Agency hosts privately owned and operated distributed energy project
- Some or all of the electricity is sold elsewhere
- Enhanced-use lease (EUL), lease, easement or license

Power Purchase Agreement

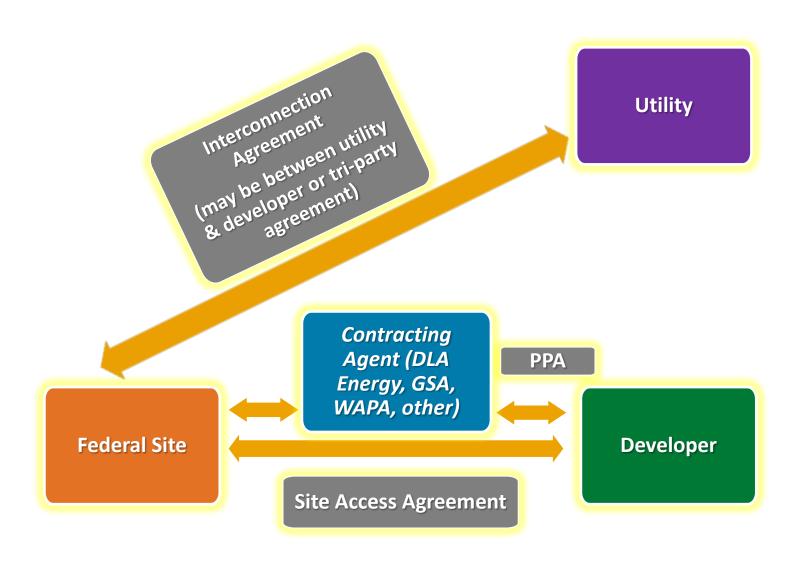
Developer

- Purchases, installs, owns, operates, and maintains distributed energy equipment on federal land and/or buildings
- May be able to take advantage of tax incentives
- May sell the project renewable energy certificates, for RE projects, if they are valuable

Agency

- Hosts an distributed energy project
- Purchases energy from the distributed energy project for the life of the contract
- Best for large projects (generally >500 kW)
- Long term contract (20 years) is ideal, but civilian agencies have limited long term contract options

Power Purchase Agreement



Procurement Options*



*Disclaimer: Not all options are available to all agencies; check with your contracting and legal staff regarding available options

PPA: 10 USC 2922a (Department of Defense only)

- Contract term: 30 years
- Department of Defense authority
 - Not available to civilian agencies
- Requires Secretary of Defense approval (delegated)
- Streamlined approval process

PPA: 40 USC 501/FAR Part 41

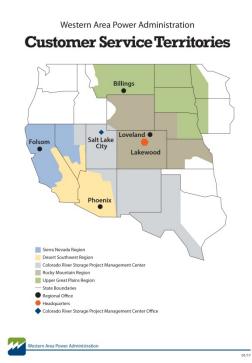
- Contract term:
 - o 10 years
 - Two GSA regions have awarded 10 years with 10-year-option contracts under FAR Part 12 and FAR Part 41 to the extent applicable
- FAR Part 41 is a GSA authority, other agencies must request a delegation of this authority from the GSA Energy Division
 - FEMP can help with the request
- Certain agencies (DOE, DOD) have permanent FAR Part 41 delegation

PPA: FAR Part 12 Commercial Items

- The Commercial Item is the electricity being purchased
- Contract length limitation is typically 5 years; options may be allowed (depends upon agency policy)
- Discuss applicability with agency contracting and legal staff

PPA: Western Area Power Administration (WAPA)

- WAPA has a unique power marketing authority
- Only available for federal agencies in WAPA's service territory
- Agency selects developer
- WAPA negotiates and signs PPA contract
- WAPA has a Renewable Resources for Federal Agencies (RRFA) program
- Fee for WAPA's services



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Real Property Arrangement

- Agency hosts privately- or utility- owned distributed energy project on government land
- Real property arrangement
 - Enhanced Use Lease (EUL)
 - Lease
 - o Easement
 - o License
- Some or all of the electricity is sold elsewhere
 - Agency may or may not purchase any electricity

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ESPC Energy Sales Agreement (ESPC ESA) Introduction

- Civilian agencies have limited options for implementing distributed energy
- ESPC Energy Sales Agreement (ESPC ESA) is a long term contract option
- OMB Memo M-12-21 title retention requirement and industry concerns regarding tax incentive eligibility
- FEMP issued two Request for Comments to better understand issues surrounding this approach
- Recent IRS Revenue Procedure may improve project viability

ESPC ESA Basics

- Long term contract option utilizing ESPC authority for a distributed energy ECM on federal buildings/land; agency purchases electricity
- May include other ECMs
 - Work with FEMP on contract structure details
- FAR Part 41 authorizes federal agencies to undertake an ESPC for the acquisition of utility services
 - "...agencies may utilize for any energy savings or purchased utility service directly resulting from implementation of a third party financed shared-savings project under 42 U.S.C. 8287 for periods not to exceed 25 years" [48 CFR § 41.102(b)(7) (2015)]

ESPC ESA Requirements

- Must meet all ESPC legal requirements including (See, e.g., 42 U.S.C. § 8287 et seq.):
 - Savings requirement
 - Statutory ECM definition in 42 USC 8259
 - ESCO must be on DOE qualified list by time of award
- OMB Memo M-12-21: Title retention and other requirements for annual scoring



Tax Incentive Considerations*

- IRS Revenue Procedure 2017-19
 - Provides a safe harbor under which the IRS will not challenge the treatment of an ESPC ESA as a service contract under §7701(e)(3) of the Internal Revenue Code
 - Allows for other ECMs as part of a comprehensive project
 - Section 4 contains specific ESPC ESA contract requirements
 - Published in Internal Revenue Bulletin 2017–7 (https://www.irs.gov/pub/irs-irbs/irb17-07.pdf)

* Tax incentive eligibility due diligence is the responsibility of the ESCO.

ESPC ESA Suggestions Based on Revenue Procedure

- Contract term 20 years or less
- Privately owned initially, with agency purchasing the equipment by end of contract at fair market value (FMV), appraised at time of sale
- ESCO transfers a portion of the payments it receives into a reserve account held by the ESCO for future FMV purchase
 - Reserve account payment based on estimated future FMV
 - Periodic FMV re-appraisals, with reserve account and/or contract term adjustments if needed

ESPC ESA Suggestions Based on Rev. Proc., Cont'd

- Contract price is on a fixed per-kWh basis and must be paid from energy savings
 - o ESCO bears all financial risk for non-performance
 - Price includes O&M and does not vary if operating costs are lower than expected
 - Price includes price of power and an amount for the reserve account (separate and in addition to price of power)
 - Total price, including reserve account payment, used to determine compliance with ESPC statutory annual savings requirement

ESPC ESA Options



Site-specific/stand-alone



DOE IDIQ



Army Corps MATOC



ENABLE

Summary: Distributed Energy Procurement Pathways

Project Ownership	Financing Method	Authority or Pathway
Government Owned	Appropriations	
	ESPC	42 U.S.C. § 8287
	ESPC ENABLE	42 U.S.C. § 8287
	UESC	42 U.S.C. § 8256 10 U.S.C. § 2913 (DOD)
Privately Owned	PPA	40 U.S.C. § 501; FAR Part 41 FAR Part 12 10 U.S.C. § 2922a (DOD) WAPA
	ESPC ESA (Title must transfer to gov't by end of contract.)	42 U.S.C. § 8287
	Real Property Arrangement	EUL, lease, easement, license, or other

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FEMP ESPC ESA Toolkit

A resource that is focused on ESPC ESA projects*

- Assumes site-specific (stand-alone) ESPC
- Process diagram, checklist, and team responsibility chart
- Project consideration description
- Authorizing legislation and other applicable information
- Editable templates— RFI, Small Business Sources Sought, RFP, site access agreement (acquisition plan and source selection plan available to federal agency staff upon request)
- Available at https://energy.gov/eere/femp/energy-savings-performance-contract-energy-sales-agreements
- Separate technical specifications document: "Procurement Specifications Templates for Onsite Solar Photovoltaic: For Use in Developing Federal Solicitations"

https://energy.gov/eere/femp/downloads/procurement-specifications-templates-site-solar-photovoltaic-use-developing

^{*} This information may be useful for other types of projects.

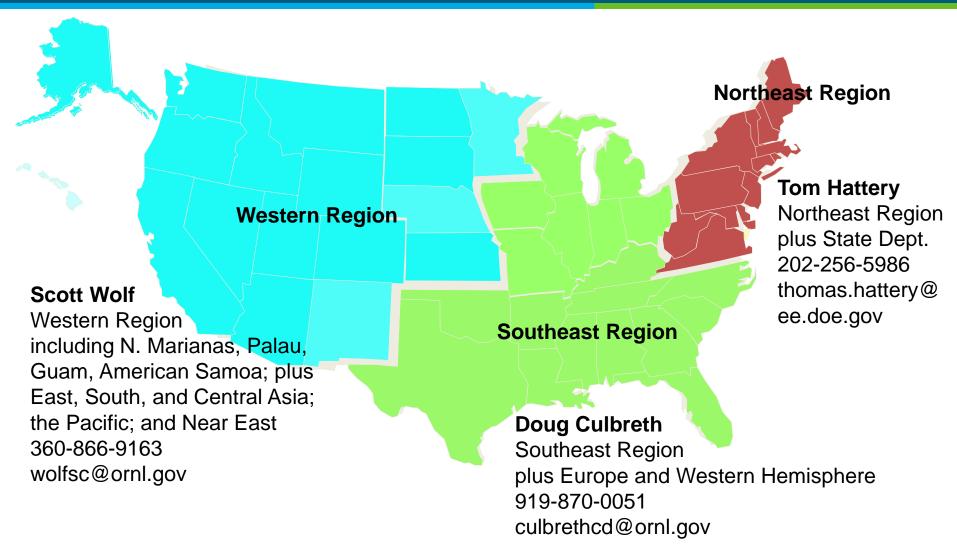
Affordable Power Infrastructure Partnership (APIP)

- Partnership between FEMP, EPA Region 9 and agencies
- Agencies pursue aggregated ESPC ESA projects concurrently
 - Increase offeror interest to foster competition
- APIP program developed based on past experience and lessons learned
 - Programmatic approach
 - Helps streamline a complex but replicable process
 - Reduce agency staff time and effort
- FEMP support technical and procurement (including contracting officer support)

Web Resources

- FEMP Renewable Energy Procurement website: http://energy.gov/eere/femp/renewable-energy-procurement-federal-agencies
- FEMP PPA website: http://energy.gov/eere/femp/federal-site-renewable-power-purchase-agreements
- FEMP ESPC ESA website: https://www.energy.gov/eere/femp/energy-savings-performance-contracts-energy-sales-agreements
- IRS Revenue Procedure 2017-19, posted in the Internal Revenue Bulletin 2017–7:
 - https://www.irs.gov/pub/irs-irbs/irb17-07.pdf

FEMP Federal Project Executives (FPEs)



http://energy.gov/eere/femp/energy-savings-performance-contract-federal-project-executives-0

FEMP's Renewable Energy Procurement Team



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