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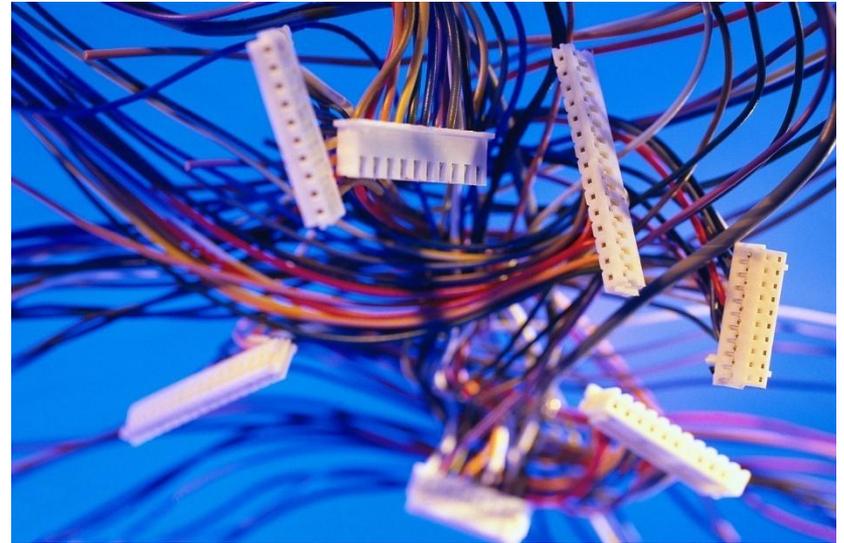
A River of Energy Solutions

Onsite Renewable PPAs/ REPAs

Scott Provinse ♦ *SunEdison* ♦ 443-909-7267 ♦ sprovinse@sunedison.com

Chandra's picture sounds complicated

- Complicated projects
- Lots of moving parts
- Lots of stakeholders
- Lots of fail points



BUT

- Don't be paralyzed or discouraged
- We have worked through these issues before
- You can build off past federal successes

Manage the Noise

- Early engagement can make your job easier
- White House supports communication with industry partners
- Leverage lessons learned
- “Our industry partners are often the best source of this [market] information, so productive interactions between federal agencies and our industry partners should be encouraged to ensure that the government clearly understands the marketplace and can award a contract or order for an effective solution at a reasonable price. Early, frequent, and constructive engagement with industry is especially important for complex, high-risk procurements”

White House Myth Busting Memo Feb. 2, 2011:

<http://tinyurl.com/3nd4nf8>

Developers can provide:

- Read on state of the market
 - Is it legal and open? If not, when do we think it will?
 - There is value is being in prepared for markets to open
- Analysis of your facility
 - energy load and tariffs
 - Solar insolation and facility configuration (roof/ground?).
- Recommendations on effective contracting vehicles
 - PPA, ESPC, UESC, MAC, IDIQ, EUL?

What you can do:

- Recruit all star team and high level champion
- Get started on long lead time issues like NEPA
- Stick to critical/execution issues like track record with financing and executing federal projects
- Don't make it harder than it is, don't get bogged down in technical stuff-you're just buying electrons!
- Pick Developer early and use most collaborative and flexible procurement tool available

- **Benefits of Solar PPAs**

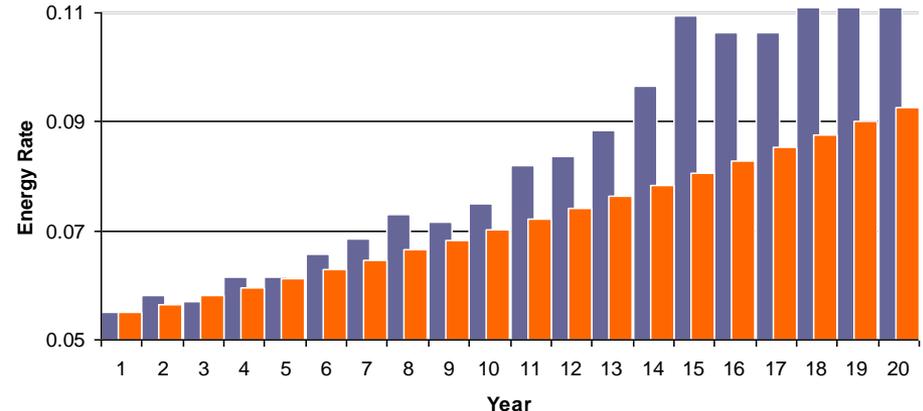
Federal PPA benefits

- BUDGET FRIENDLY! Low to no-cost progress on EPACT and other energy and environmental goals
- LOW RISK. Developer takes bulk of risk, Govt. only pays for Energy Delivered.
- Allows agencies to take advantage of subsidies and tax credits that would otherwise further burden the economics of projects.
- Replicable and first mover advantage
 - Much of the hard work has been done
 - Deal structure is replicable
 - Allows
- Hedge
 - Solar rate set equal or below utility's rate in year 1
 - Utility rates are increasingly volatile and can go up or down (generally up!) but solar PPA rate is always predictable
- On-peak production
 - Solar energy is produced when grid energy is most expensive

Predictable PPA prices

vs.

Volatile energy prices



Intro to Federal Power Purchase Agreements

- **Power Purchase Agreement (PPA) or Renewable Energy Purchase Agreement (REPA):**

- First PPA was “commercialized” in 2004: Since then, businesses, governments, and utilities have realized that PPAs provide:
 - the lowest risk
 - the lowest hassle (not yet true for federal clients!)
 - the lowest cost



SO, Why are there so few Federal PPAs?

1. Developer Selection:

- RFP evaluation criteria often miss true execution risk:
 - Federal financing experience on renewable projects
 - True renewable experience
- RFPs often require obtaining subject matter expertise on a dynamic, complex, and innovative process-reality-just buy electrons
- RFPs often force developers to adhere to terms and conditions that unknowingly hinder the project

SO, Why are there so few Federal PPAs?

2. Contracting Authority:

- Most Federal agencies are limited to 10 year power purchase authority (and agencies are unwilling to pay premium for renewable energy)
- Those with longer authority, such as DoD branches, have had burdensome and untested protocols for obtaining authority

SO, Why are there so few Federal PPAs?

3. Contracting Method:

- IDIQs and Inter and Intra agency agreements are complex and require strong coordination and high levels of buy-in
- PPAs are novel for federal agencies and require significant review
- ESPC process is long and designed for EE not PPAs
- Utilization of Power Administrators has been limited to 4 DOE/NREL projects and 1 Army with Western

SO, Why are there so few Federal PPAs?-Continued

4. Third Party Financing

- Most solar financiers have limited experience with federal contracting
- FAR or DFAR or other terms misunderstood and poorly designed for PPAs/REPAs
- Appropriation risk/Anti-Deficiency Act
- Take or Pay-need for reliable revenue stream
- Dispute resolution/sovereign immunity
- Termination for convenience
- Assignment
- Rights of access/preemption
- Lender's rights (but not obligations)
- Liquidated damages
- Non-traditional deal structures: Task Order's IDIQs, ESA's under ESPCs
- Government desires protection against all risks, whether realistic or not, increase financing risk and cost

Succeeding in Breaking the PPA barrier

1. Selecting the right renewable team:

- Contracting officer's knowledge of contracting methods allows flexibility and ability to be creative (not paralyzed or unwilling to do things differently than in the past).
- Strong relationships and trust from decision making hierarchy
- True commitment, resources and authority
- High level champion to clear hurdles and pull project up

Succeeding in Breaking the PPA barrier

2. Contract Vehicle Selection

- FAR and DFAR do not currently address PPAs well-though some of the utility provisions are promising (and raise other concerns)
- A thorough understanding of your contracting vehicles and their abilities and then tailoring the vehicle to allow the maximum benefits of third-party financing while recognizing the need to minimize “real” risks to the Government
- Examples: Task Order under MACs and/or IDIQs; stand alone PPAs based on the FAR; Utility Energy Services Contracts, Energy Services Agreements under Super ESPC

Succeeding in Breaking the PPA barrier

2. Contract Vehicle Selection-Continued

- DoD agency? Use 2922a-OSD appears to support use for renewables
- In the West? Engage Western: 20 year PPA/REPA and IAA
- Neither of those apply to you? Talk to developers about other options (ESA under ESPC)

Succeeding in Breaking the PPA barrier

3. Selecting the right development partner:

- Execution risk with Fed PPA /REPA cannot be understated, developer must have history of financing complex federal PPAs /REPAs or long history executing on complex, novel projects
- Experience managing dynamic relationships and issues (Utility-IC)
- Developer's history and staying power critical in federal projects as contract award/privity makes replacing PPA providers more complex
- Developer and federal customer are entering 20 year partnership

Conclusion

- PPA/REPA projects have HUGE benefits
- But, they're complicated
- Consulting with developer early increases chance of success and reduces workload

Thank you! Questions?



Scott Provinse

sprovinse@sunedison.com

443-909-7267