

PPAs & Procurement

Green Communities Summit

- Tuesday November 18th, 2025
- Presented by Walter Gray – Program Director, PowerOptions



Presenter



Walter Gray

Program Director, Alternative Fuels
PowerOptions

- Involved in PowerOptions Solar programming for 10+ years 150+ projects, 100+ MW, \$200mil+ in savings
- Responsible for managing procurements, financial modelling design, template contracts, program administration, project support

Agenda

- Power Purchase Agreements 101
- Front of the Meter vs. Behind the Meter
- PPAs vs. Ownership
- Procurement Options
- Getting Started

Power Purchase Agreements “PPAs”

- Developer finances, permits, designs, builds, commissions project
- Financier owns project for term (~20 years)
- Host buys power at a fixed “PPA Rate”

PPA Rate Drivers

- Build costs
- SMART incentive
- Federal tax credit
- Financier IRR requirements
- Other grants/funding
- System production

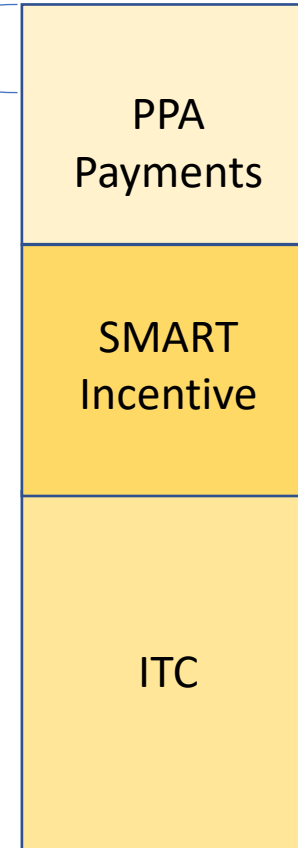
PPA Project Financial Modelling

- PPA payments amortized over lifetime system production
- PPA Rate “solved for” based on other factors
- Upfront grant payments effectively “buy down” PPA rate



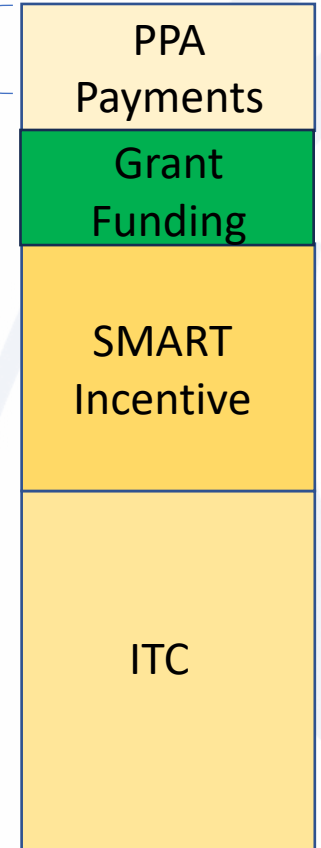
Build Costs

Developer Margin



Project Owner Return Stack
@30% ITC

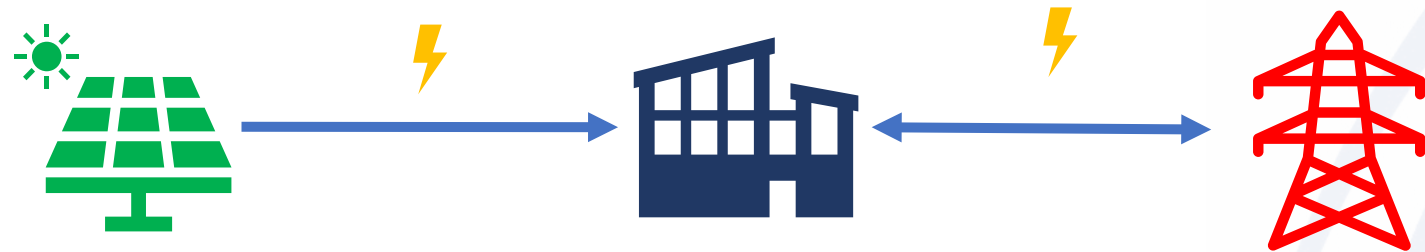
Developer Margin



Project Owner Return Stack with Grant

Behind the Meter (“BTM”) Solar

- BTM systems provide the most value so always preferred
- Utilities starting to evolve thinking around BTM systems that serve on-site load, can improve interconnection timeline

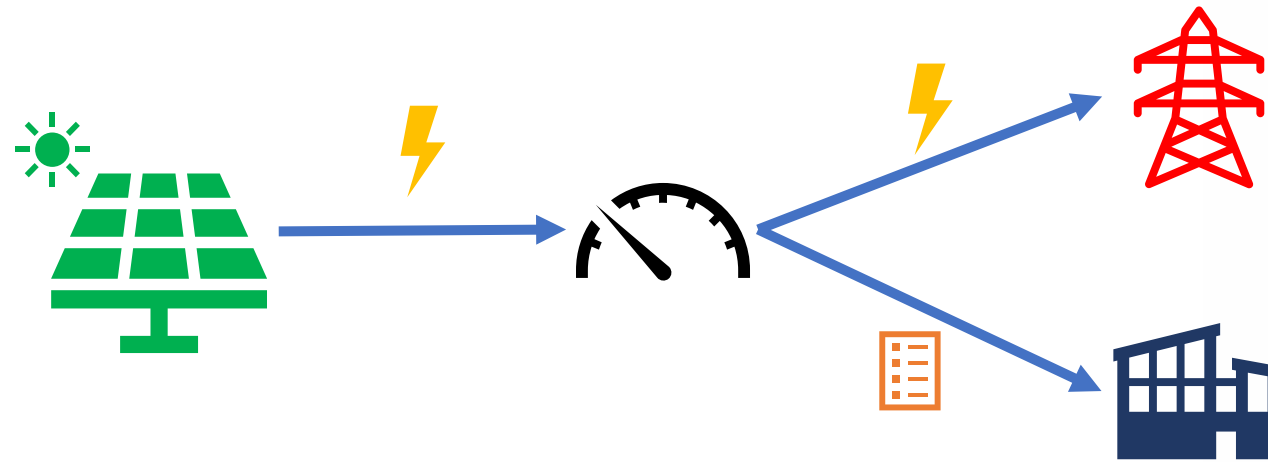


- Solar generation serves building load first; directly displaces grid power at a lower cost per kWh
- Savings per kWh = (Grid Power Cost) – (Solar Cost)
- Excess generation flows back to the grid, generates credits (NMCs or AOBCs)

Front of the Meter (“FTM”) Solar

Prefer FTM solar if available development space can site more solar than can be used on-site

- Ground mounts
- Parking canopies
- Large rooftops



- Solar generation exports directly to grid; utility meters production and converts to transferrable bill credits. Can be used at the host site or assigned to another electricity account.
- Savings per kWh = (Bill Credit Value) – (Solar Cost)
- Bill credits worth less than kWh used on-site

PPA Vs. Ownership

	PPAs	Ownership
Advantages	<ul style="list-style-type: none">• No capital expense• No O&M responsibilities• Developer monetizes incentives• Very low risk• Alignment of interests	<ul style="list-style-type: none">• Higher financial benefit
Disadvantages	<ul style="list-style-type: none">• Lower financial benefit	<ul style="list-style-type: none">• Upfront cost• Ongoing costs• Ongoing O&M/admin responsibilities• Project risk• Incentive risk

Procurement Pathways

- **Standard 30B procurement**
 - 30B exceptions for “electricity services” challenging for PPAs as PPAs typically involve a “lease” in addition to the actual “PPA”
- **Chapter 25A**
 - Allows direct contracting for “energy conservation projects” <\$300k
 - Must contract with electric/gas utility subcontractors (e.g. MassSave contractors)
- **MGL Chapter 164, Section 137**
 - Public entities may participate in “competitively procured” programs offered on behalf of a public instrumentality for electricity, natural gas, telecommunications **services** or similar **products**.
 - Associated “leases” specifically allowed without competitive procurement
 - Statute utilized by PowerOptions programs



Procurement Considerations



- **Timeline**
 - Federal ITC expirations – projects must “start construction” by July 4th, 2026 OR be placed into service by end of 2027
- **Team Expertise**
 - Solar project development experience crucial – in-house or outsource via consultant
 - Failed RFP process expensive, frustrating, could jeopardize ITC timeline
- **Equipment choice and iterating**
 - Flexibility – system design
 - Flexibility – components
 - FEOC
 - Tariffs
- **Solar appetite**
 - Ensure you don’t “overbuy” by considering usage and existing solar projects/contracts

Project screening



Rooftop

Rooftops

- Roof that will last 20yrs (generally <10yrs old)
 - Southern exposure preferred
 - Minimal shading
-



Ground Mounted

Ground Mounts

- Capped landfills
 - Minimal shading
-



Parking Canopies

Parking Canopies

- At least about 100 contiguous spaces
- Minimal shading



Thank you!

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