Solar Power Purchase Agreements



Presentation Overview

- •30,000' view Why now?
- •20,000' view Why Colorado?
- •10,000' view What to consider...
- Roof view How it works and does it make sense for you?

30,000' view – Why now?

- Environmental motivation
- Political motivation

Environmental Motivation

- Mitigate climate-change
- Decrease health impact of pollution
- Reduce consumption of resources

Political Motivation

- Reduce dependence on foreign fuel sources
- Reluctance to tap domestic resources
- Distaste for wars to stabilize oil exporters

20,000' view – Why Colorado?

 These environmental and political drivers led to legislative and financial changes designed to bolster the solar energy industry.



Legislative Incentives/Mandates

- Federal incentives (ITC and grants)
- State Renewable Energy Standards (RES)
- Utility Company rebates and REC payments

These factors have coalesced to attract investors and innovators to the solar industry.

Colorado is strategically poised to lead in this industry.

10,000' view – What to Consider

- Factors when pursuing photovoltaics
 - Physical
 - Financial
 - Contractual
 - Developer

Physical Considerations

- Design Elements
- Roof Mount
- Ground Mount
- Net-Metering

Design Elements

- Systems must be grid-tied and on-site
- Quality site surveys produce quality solar facilities
- Ensure system is not oversized
- Production Factors:
 - Tilt & Azimuth
 - Derate factor
 - Solar obstructions

Roof-Mount

- Typically hidden from view
- Optimal for built-out sites
- Provides protection against UV, hail, etc.
- Reduces solar-heat gain
- Structure must be sufficient to support load
- Roof covering must be acceptable
- Shading concerns must be addressed

Ground-Mount

- Optimized production
- No building impact
- More visible/exposed
- Must be fenced
- Generally requires larger footprint

Net-Metering

Excess electricity produced by the solar system spins the existing meter backwards, "banking" the electricity until it is needed by the customer. This provides the customer with full retail value for all the electricity produced.

Financial Considerations

- Initial price of solar-generated power
- Escalators
- Initial savings vs. long-term savings

Contractual Considerations

- Length of term
- End-of-term options
- Mid-term options
- TABOR
- Safe-harbor stipulations
- Insurance requirements
- Operations & Maintenance

Developer Considerations

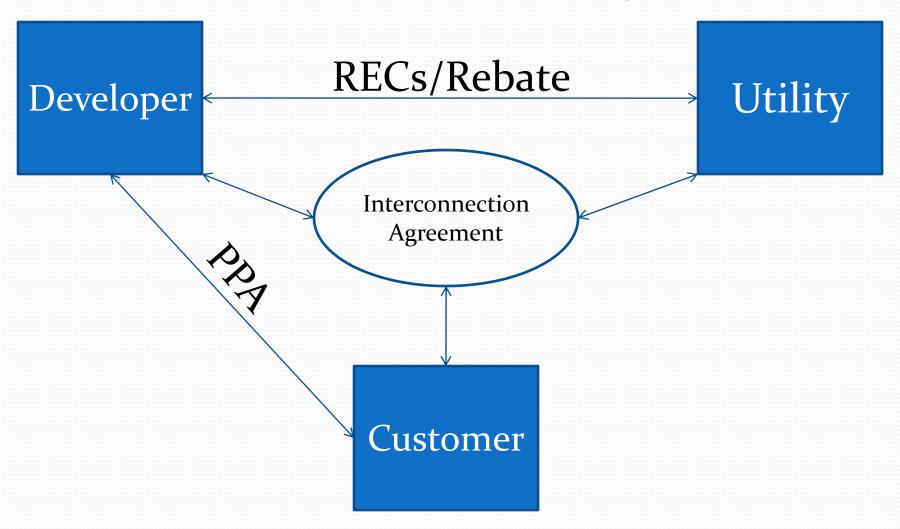
- Financial Strength
- Project Management

Roof View – How it Works

What is a Solar PPA?

 A Solar PPA is a long-term service agreement whereby a private entity installs, owns, operates and maintains customer-sited renewable-energy equipment. The customer agrees to purchase the energy produced by the equipment at a predetermined rate.

PPA Relationships

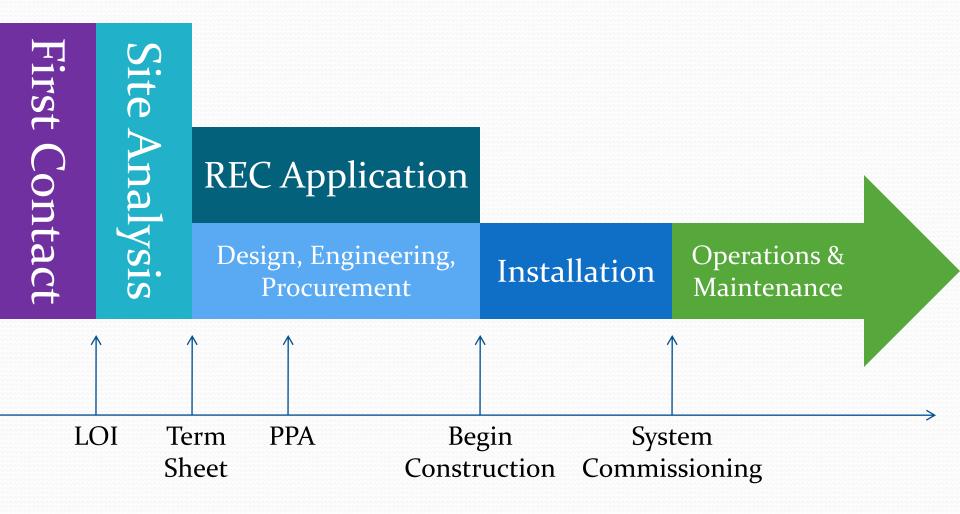


Standard Terms

- Contract Term
- Initial rate
- Escalator
- Site Lease
- Facility Description
- End-of-term options



PPA Process



Financial Benefits

- Begin saving immediately.
- Continue to save for decades.
- Hedge against energy rate increases.

Educational Benefits

- Student and community exposure to renewable energy technology
- Solar energy production monitoring tools
- Classroom demonstration and instruction opportunities

Environmental Benefits

- Conserve non-renewable resources.
- Reduce greenhouse gas contributions.
- Contribute to Colorado's Renewable Energy Standard goal.

Does a PPA make sense for you?

- No available path to simple ownership
- No access to commercial tax and depreciation incentives
- Sufficient electrical consumption
- Adequate area available for the solar power facility

Canon City Case Study

- 8ookW total installed PV
- 7 schools & bus garage
- Non-penetrating mounting systems
- Annual avoided emissions equivalent to 120 homes

Thank You!

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