

Mid-Atlantic Renewable Partners



DELAWARE RENEWABLE ENERGY TASKFORCE COMMITTEE

December 1, 2010

Mid-Atlantic Renewable Partners

2

MARP provides development and project financing expertise for commercial, governmental and non-profit organizations considering renewable energy projects.

- Focus on solar power projects in Mid-Atlantic, additional wind and geothermal development across the United States
 - Tiers 2 and 3 in the Delaware market
- Project financing capabilities ranging from \$ 1 ~ 100 million, per project
- Wilmington, DE Headquarters with all partners residing in Delaware



SOLAR MARKET

3

United States Solar Market - Primary segments (typical size)

- Residential (5-15 kW)
- Commercial (100kW-1MW)
- Industrial (1-5 MW)
- Utility (10 MW and up)



Mid-Atlantic Renewable Partners, LLC - confidential & proprietary

SOLAR MARKET

4

Delaware Solar Market - Anticipated Tiers

- Tier 1 (0 - 50 kW)
- Tier 2 (51 – 500 kW)
- Tier 3 (501 - 2 MW)
- Tier 4 (2.01 MW and up)



Mid-Atlantic Renewable Partners, LLC - confidential & proprietary

SOLAR MARKET FINANCE

5

Tier 3

- Primary financing options:
 - Balance sheet
 - Lease
 - Power Purchase Agreement (PPA)



Mid-Atlantic Renewable Partners, LLC - confidential & proprietary

SOLAR MARKET FINANCE

6



	Balance Sheet	Lease	Power Purchase Agreement
Ownership	Host	Financier	Financier
Capital Outlay	Host pays for system	Financier	Financier
Contracting & Operational Risk	Host	Host	Financier
Ability to claim Federal ITC	ONLY FOR TAXABLE ENTITIES	Yes	Yes



SOLAR MARKET FINANCE

7

Delaware Solar Market – Tier 3

- Over 90% of similar solar projects encompassed by Tier 3's anticipated project size (in kW) utilize PPA financing structure
 - Proposed range (size): 501kW – 2 MW
 - Typical pricing range: \$ 2.5 – 10.0 million

- PPAs provide for full monetization of Federal, State, Local and other incentives
 - Federal Incentives are ITC and MACRS
 - State, Local and other incentives are SREC based



SOLAR MARKET FINANCE

8

Tier 3 Solar Projects (use of PPAs)

- PPA Benefits
 - Minimal to zero upfront capital commitment of host
 - Full utilization of tax credits
 - Percentage of power needs shifted to fixed pricing for term of contract
 - O&M responsibility transferred to financier
 - Various options during PPA term for off-taker/host to purchase solar system from financier
 - Various options regarding system ownership upon expiration of PPA agreement



SOLAR MARKET FINANCE

9

Tier 3 Solar Projects (use of PPAs)

- PPA Drawbacks
 - Off Taker/Host legal review and expense
 - Loss of ownership of SRECs and other “Green” attributes by host



Mid-Atlantic Renewable Partners, LLC - confidential & proprietary

Tier 3 Solar Projects (use of PPAs)

- **PPA contracts have become the market standard due to various benefits:**
 - **Cost:** No upfront capital required - Customer agrees to pay for solar energy generated from the system, nothing else
 - **Efficiency:** Incentives are fully maximized, lowering LCOE
 - **Predictability:** PPA rate is a set \$/kWh rate with fixed escalation over the term
 - **Simplicity:** Responsibility for operation, maintenance, monitoring and on-going administration of project transferred to Financier
 - **Stakeholder interests aligned:** Maximizing system output for entire contract term (*usually 20 years*) benefits all parties



SOLAR MARKET FINANCE

11

Tier 3 Solar Projects (use of PPAs)

Developer/Financier viewpoint:

- General criteria to consider
 - Credit quality of off-taker/host of vital importance
 - Location of potential project and current State-based incentive program
 - Current LCOE of off-taker/host
 - Financier's Required Return (i.e. Hurdle Rate, I.R.R.)
 - Site specific conditions



SOLAR MARKET FINANCE

12

Tier 3 Solar Projects (use of PPAs)

Developer/Financier viewpoint:

- Primary financial criteria to consider *specific for Delaware*:
 - Delaware Incentive Program
(*Relating to anticipated SREC income over term*)
 - Current LCOE of off-taker/host
(*Relating to anticipated energy income over term*)
 - Current Cost per Watt for solar installation
(*Relating to anticipated capital cost of the project*)
- Three criteria above directly impact \$/kWh PPA pricing offered to potential Off-taker/Host



SOLAR MARKET FINANCE

13

Mid-Atlantic Renewable Partners Recommendations:

To Delaware Renewable Energy Taskforce:

- Establishment of Fair and Transparent SREC Procurement Process
Subcommittee model considering appropriate balance and level of controls
- Establishment of long-term SREC contracts
Subcommittee currently modeling two -10 year terms
- Encourage additional and direct participation from ALL Stakeholders
Participation from various local manufacturing stakeholders should produce a more robust procurement program
- Provide framework for resolution of Procurement Process goals
Establish interim deadlines to facilitate progress toward approval in a timely fashion



Thank You! Questions?

14

Barry W. Yerger Jr.
CEO
Mid-Atlantic Renewable Partners
302-529-1000
Barry@midatlanticrenewablepartners.com

