



An Overview of the Renewable Energy Certificate Market:

Renewable Energy Markets Conference

November 17, 2011

RECs 101: Table of Contents



- **Market Participants**
- **Commercial terms of a transaction**
- **Ways to do a deal**
- **Various Markets and the standard terms**
- **Closing the deal**

Market Participants



- **Compliance Buyers**

- An entity that has an obligation to comply with a state RPS
 - Utility, Power Marketer, 3rd party supplier

- **Naturals**

- Any entity that has a “natural position” in the markets
 - Utility has a natural obligation to be a buyer
 - Renewable Generator (Wind, LFG, Solar, etc.) is a natural seller
 - Exceptions Apply

- **Speculator**

- An entity that does not have a natural position, yet has an opinion on the future price of a market

Market Participants



- **Power Marketer**

–An entity that buys power in the wholesale market and sells it into the retail market – (See Compliance entity)

- **Aggregator**

–An entity that purchases smaller volumes of a specific type of REC, packages them together to sell a larger wholesale volume

- **Broker**

–An intermediary in the markets that represents the buyers and sellers in the marketplace and earns a success based fee (does not take a principal position)

Negotiating the Deal



- **How to transact**

- Bilateral: A direct negotiation between 2 counterparties
- Brokered: A transaction arranged by a 3rd party (subject to contract and credit)
- Cleared: A transaction consummated or given up to an exchange (ICE – As of today only NJ, CT and MA Class 1)

- **Types of Transactions**

- Firm: Seller will commit to provide RECs at a fixed price regardless of pricing or rules in the future (liquidated damages)
- Unit Contingent: Unit specific - if seller produces they will deliver
- Unit Firm: A firm transaction on generation; but only if unit is eligible (must use commercially reasonable efforts to maintain certification)

Negotiating the Deal, cont.



- **Deal Terms**

- Price

- Volume

- Term

- Delivery

Market Standards



- **PJM - (Mid-Atlantic States)**

- RECs are delivered through the PJM GATS

- NJ, PA, DE: Run on a Reporting Year – Delivery on or before July 15th

- MD and DC: Run on Calendar Year – Delivery on or before March 1st

- **NEPOOL (New England)**

- Run on calendar year

- RECs are delivered through the NEPOOL GIS

- On or before June 1st

- **ERCOT (Texas)**

- RECs are delivered through Texas GIS

- On or before February 28th

Market Standards



- **WECC (Western States)**

- RECs are delivered through the WREGIS

- CA is the main market; RPS details still being ironed out

- **National Voluntary Market (Green-e)**

- RECs are delivered through Attestation or tracking system TBD (NARR)

- Green-e Reporting Year = back half of prior year to Q1 of following year

- Ex. Green-e Reporting Year 2011 = July 1, 2010 – March 31, 2012

Closing the Transaction



- **In a Brokered Deal**

- Electronic confirmations will be issued by Broker
- Commercial Terms have been agreed to
- Buyer and Seller to use good faith to close transaction

- **Cleared**

- Handled by FCM or clearing house

- **Bilateral**

- On a per deal basis



Voted Top Renewables Broker – North America

2004-2010 Environmental Finance and Energy Risk Customer Survey

EVOLUTION MARKETS INC.

10 Bank Street – 4th Floor

White Plains, NY 10606

914-323-0257 Tel

914-328-3701 Fax

EVOLUTION MARKETS INC.

101 California St Suite 2750

San Francisco, CA 94105

415-963-9130 Tel

415-963-9121 Fax

Andrew Kolchins

akolchins@evomarkets.com