

**Sudbury, MA, Energy and Sustainability Green Ribbon Committee  
Meeting Minutes September 7, 2010**

**OPENING:**

The meeting of the Energy and Sustainability Green Ribbon Committee was opened by Chairman, Bill Braun, at 7:37 P.M. on September 7, 2010 at the Town of Sudbury DPW Building Conference Room.

**ATTENDANCE:**

| Committee Members  | Attending |
|--|-----------|
| Rami Alwan   |           |
| Jeffrey S. Beeler, Vice Chairman, Sudbury School Committee                               |           |
| William G. Braun – Chairman  | X         |
| Dean Holden  | X         |
| Edward Lewis   | X         |
| Robert Morrison  | X         |
| Mark Sevier  | X         |
| Michael E. Melnick, Co-Chairman, Sudbury Permanent Building Committee                    |           |
| Building Inspector, Town of Sudbury  |           |
| James Kelly  | X         |
| Guests / Presenters  |           |
| Joe Harrison - Senior Project Developer - <i>Borrego Solar Systems, Inc.</i> – presenter | X         |
| Tom Witkin – interested Sudbury citizen  | X         |

**Agenda/Notes:**

Sudbury has been contacted by several renewable energy related companies that are interested in reviewing what they could offer to help Sudbury reduce energy consumption and costs. The energy committee is meeting with viable companies to gain a better understanding of specific goods and services available that will allow the committee to make an informed recommendation to the town on what might be beneficial to explore further.

Mr. Joe Harrison from *Borrego Solar Systems* presented at this meeting. He provided a company overview along with a synopsis of their municipal Power Purchase Agreement (PPA) activities. Following are notes recorded from his presentation and the committee’s questions. A copy of the presentation was not provided.

This should be considered preliminary information designed to help educate the Energy Committee with *Borrego Solar Systems* PPA offerings.

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*Borrego Solar* was founded in 1980 and has specialized in grid-tied solar energy since 1999.

The company is based in California with a regional office in Lawrence, MA along with several satellite offices around the US.

They have facilitated the installation of over 18 Megawatts of solar electric (PV) systems since 1999.

Currently *Borrego* is focusing on large-scale solar-electric projects for corporate, governmental, and commercial real-estate clients.

As an integrated supplier of PPA's *Borrego* manages the entire project including the system design, procurement, financing and operation.

Mr. Harrison reviewed the typical structure of a municipal Power Purchase Agreement. According to *Borrego* at this time significant Federal and State incentives and the institution of net metering allows Massachusetts communities to enter into a very cost effective PPA.

With a Power Purchase Agreement the host community provides a location for a private company to build a Photovoltaic (PV) array (typically a capped landfill, school or municipal buildings) and agrees to buy the electricity from the system owner at a discounted rate for a fixed amount of time. The outside company pays both the capital cost of building the system and the ongoing operations and maintenance costs. At the end of the contract (currently 10 years) the host community can renew the agreement, purchase the PV system at fair market value or have the system removed at no charge.

Any excess electricity generated by the array is fed back into the grid and must be purchased by the electric provider at current rates less the renewable energy and energy conservation surcharges.

The PPA *Borrego* discussed could be available at no capital or operational cost to the town and the town could purchase electricity at a significant discount. *Borrego* is working on a large PPA installation with Easthampton, MA and the electricity purchase cost is expected to be in the 6 to 7 cents per KWh range.

The closed and capped Sudbury landfill was discussed at a high level and might be a candidate for up to a 2 Megawatt installation.

School based systems were also discussed but may be more challenging due to the roof load from the panels.

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The Energy Committee is in the early stages of learning about PPA's and has a few preliminary concerns that would need to be discussed and followed up upon:

- 1) Landfill – to help determine if the landfill site is suitable
  - a. The Federal, State and local permitting processes would need to be fully explored and understood.
  - b. Organic growth issues would need to be addressed in an environmentally acceptable way.
  - c. Grid capability for the tie-in would need to be sufficient.
- 2) Roof loading on school buildings could be a concern. Thin film PV was discussed as a potential alternative – although currently not a vetted product available thru Borrego.
- 3) Incentives – this PPA financial model is based largely on federal incentives (they pay approximately 30% of the capital cost) and state incentives – primarily the SREC program which requires MA utility companies to source a certain percentage of electricity thru renewable generation sites or purchase SREC energy credits from renewable energy sites. These programs seem to be accelerating the adoption of renewable power generation; they appear to be on solid footing, however a concern would be these programs changing or the SREC program limits being reached.

The Energy and Sustainability Committee wishes to thank Joe Harrison for his time and educational presentation.

**Next Currently Scheduled Meeting:**

- September 9, 2010 at 7:30 PM, DPW Building Conference Building.

**ADJOURNMENT:**

- The meeting was adjourned at approximately 9:22 P.M.

*Minutes submitted by: Edward Lewis, September 9, 2010*