

**Gloucester Energy Commission
Meeting Minutes: 3/22/11**

CEC Members Present: Tom Balf, Linda Brayton, Sam Cleaves, Linda Stout-Saunders, Candace Wheeler

City Representatives Present: Greg Cademartori, Stephen Winslow

Guests: Steve Patterson, FloDesign; Richard Kleimanre, representing Equity Industrial Partners and Gloucester Engineering; Elizabeth MacDougal and Maryka Gillis for Gloucester High School; Joe George, Sun Light Solar of Newton, MA

Presentation by FloDesign

Steve Patterson provided a draft of their presentation concerning the proposed four-wind turbine project known as “Bond Hill”. The presentation will be made at a public meeting to be held at Gloucester High School, 6:30 pm, March 31, 2011. This first meeting is to present an outline of the proposed project, benefits, impacts, and obtain community input. Certain items to be addressed are acoustics, flicker, changes to the landscape, FloDesign’s technology vs. other commercial wind turbines, and project economics.

Project Economics: Estimated Project cost is \$2,160,000. The Mass CEC subsidy is \$340,000 per turbine (\$1,360,000). The \$800,000 balance is proposed to be funded by a tax equity investor under a purchase power agreement. Estimated annual energy savings benefit to the City is \$80K-120K assuming cost of \$0.11kWh.

Although more in-depth studies are still required, the following were noted:

- Turbines are sited 400 feet from the nearest property line. It has been emphasized that the FloDesign turbines are one-third the size of a typical commercial turbine.
- Turbines are visible through the trees from the nearest property on Old Salem Road
- The turbines are visible from Stacey Blvd.
- 14 of the closest properties have been used as the benchmark for measurement of noise and flicker. Most are in the low range of noise. Steve to advise if noise can be simulated. Flicker is measured in hours per year. The worst-case scenario is projected to be 30 hours of flicker per year. (Note that there are 8160 hrs in a year. Foliage and weather conditions---sun/no sun are considered.) FloDesign will provide examples of how flicker has been managed at other projects. More detailed site assessments still to be completed.

Timeline: assuming all matters are favorably addressed and applications, permits, financing, etc. are in order, construction could commence the Summer of 2012.

FloDesign Action Items:

- We urged FloDesign to get in touch with Mike Hale concerning road access to the site (apparently DPW staff visited the road and OK'ed it for access but that needs to be revisited prior to the meeting) and to have a conversation with Councilor Verga to get his input.
- Suggest that the presentation include an overview of the process from proposal, permitting, construction and ongoing operational/maintenance requirements.
- For the 31st, the CEC will introduce Steve Patterson of FloDesign and facilitate the meeting. The CEC will coordinate with Gregg Cademartori on introduction details and background City energy information. It should be emphasized that this is an informational/introductory meeting and that further meetings will be held.
- Release of toxic chemicals during maintenance phase (or otherwise) to be advised.
- Additional power lines, if any to be advised.
- Impact on wildlife, i.e. birds. Apparently the Mass Audubon society has been observing this and its still addressing
- Greg Cademartori to provide the City's kWh usage; it was stated that annual current cost of power is approx. \$1-2 million.
- A second meeting will be held to continue building a relationship with the community and to further address any questions/concerns generated by the first meeting. FloDesign is very willing to work closely with the City to help us learn more about the Bond Hill proposal.

Presentation by Richard Kleimanre representing Equity Industrial Partners and Gloucester Engineering

Rich Kleimanre outlined the concept of a wind and solar project for Gloucester Engineering (GE). Rich is open to community meetings, site visits and working to help the City Council, various other City departments and the community define what the project has to offer the City. This is deemed to be an ambitious project, with one or even two commercial size turbines close to the proposed Varian and City wind turbine sites all in the area of Blackburn Industrial Park (concern is that this area could be seen as a "wind farm"). Gloucester Engineering is also proposing to site up to a 2 MW ground and roof mounted solar technology. GE is using wind data gathered from the Varian site and have a Met Tower in place. A key component of this project hinges on the use of investment tax credits (ITC), which are due to expire on 12/31/11 (construction must commence as of 12/31/11 in order to qualify for ITC) so there are obvious constraints.

This would be a power purchase style agreement (PPA) inclusive of payments to the City each year, though no specific numbers were offered. (The Kingston project was mentioned as an example of the proposed structure of the GE project.)

GE Action Items:

- Greg Cademartori will provide Richard a copy of the Boreal Study performed for the City's proposed wind turbine in this area.

Other Meeting Discussion/Action Items:

The CEC, working with Steve Winslow our new Clean Energy Manager and Gregg C., will be reaching out to the special permit decision-makers, the City Council, as we must find ways to help them be well informed about any project prior to pre-application or actual permit hearing. Though we anticipate holding clean energy/Gloucester renewable project information forums/workshops, any ideas from Council members and others about how we might improve communications and provide consistent and timely project-related information to them and the community are welcomed.

The two guests representing Gloucester High School Environmental Club expressed their interest in constructing solar panels on the H.S. roof. The City had applied for a 4kW grant for such a project that was declined.

Determine the schedule for roof replacement schools.

Look into the "greening" of the High School stadium. Such a project could possibly fall under a special program that is available to universities.

February minutes accepted as submitted.