

**Gloucester Clean Energy Commission Meeting of Feb. 23, 2011**

Minutes approved on 3/22/11

Present: Sam Cleaves, Susan St. Pierre, Linda Brayton, Tom Balf, John Moskal, Candace Wheeler, Greg Cademartori (Community Development Dept.)

Guests from Boreal Inc.: Tom Michelman (Principal); Alex Weck (Project Manager)

**Minutes** of Jan. 25, 2011 approved.

**Public Comment:** There was no public comment.

**Presentation of Boreal Feasibility Study for Blackburn Park Wind Turbine**

Tom Michelman and Alex Weck from Boreal presented the draft feasibility study for a wind turbine on city-owned land in Blackburn Park, near the Varian property and the Babson Reservoir. Copies of a powerpoint summary of the presentation were provided to the CEC members. The Mass. Clean Energy Center has approved the draft with one minor modification. Feasibility Study and powerpoint tables document: wind resources; proposed sites and their flicker/noise/telecom impacts, accessibility, and location cost comparison; comparison of cost/output of various types of turbines; overall project cost breakdown; financing options; third-party financial picture pre and post-tax; status review of other Massachusetts and Rhode Island projects; Kingston project as a model of City lease approach; turbine decision drivers for City; and Conclusions.

Discussion points during the presentation included the following items.

There are two potential sites on two knolls within the City-owned property. Boreal is also working with Varian on their proposed wind turbine on Rail Cut Hill, and close coordination with Varian may make it possible for the crane that will install Varian's turbine (from a location in Varian's parking lot) to also install the City turbine. However, Varian is currently further along in the process than the City is. Tom Michelman just reviewed the turbine supply agreement for Varian, in preparation for signing a contract.

Vestas Turbines Inc. had approached Varian 5 years ago when market for wind power was favorable about multiple turbines at Varian, but now they are interested in doing just one, in a constantly shifting market. The price for Varian is still around \$6 million for a 1.8 megawatt turbine, and there are tax incentives for Varian if they move forward this year.

Boreal chose Vestas V-100 1.8 MW 425-foot turbine as best option for City, but noted that Sany Chinese-made turbine would be somewhat less costly. Asked if City preferred to use American or European turbine over Chinese manufactured turbine.

RE location comparison, main factors are financial. Location 2 requires more tree removal, so Loc. 1 is preferable, but Loc. 1 has potential microwave interference issue that must be researched via AT&T, and resolved.

RE access to sites, there are 3 separate routes requiring differing amounts of clearing and equipment-lifting. Project cost breakdown indicates 54% is the “delivered turbine” cost, reflecting that Blackburn is a more difficult site to access. Route A would require wetland mitigation. Susan St. Pierre preferred Route B, and noted that if City did 2 turbines, it might be worth building a new road to sites, following ridge line.

Boreal and CEC discussed permitting issues. Sites are in Babson Reservoir watershed, but City has already allowed Varian to have permits for 2 turbines in same watershed. Any chance that since Varian only proceeding on 1 turbine, other permit could be transferred to City? Other permitting issues include wetland mitigation, Watershed Protection Overlay District approval, and need for NPDES storm-water permit required for any construction over 1 acre. Fed. Aviation Administration determination of no hazard already received.

Boreal and CEC discussed ownership of the turbine. Options range from full City ownership to Public/private partnership, to full private ownership on land leased by City. Moving away from full City ownership reduces both financial risk and potential financial benefits to City. John Moskal noted that it may be hard to sell City Council on City ownership of the turbine due to the big capital outlay and ongoing maintenance and liability costs. If turbine is privately financed, and all City gets is lease payments and discounted power for municipal buildings, will City think project is worth the trouble? If City owned, Vestas V-100 would take only 2.9 years to pay off via savings on City electricity, assuming 3.5% inflation in energy costs. Project would be cash flow positive to City in 2015.

If City owns, could it provide discounted power to City residents or sell shares of power to other users, becoming a small power cooperative? Availability of planning/construction grants is a factor, but Mass. Clean Energy Center (MCEC) April-May grant round is too soon to be a factor in City’s decision whether to move forward now with a Blackburn turbine.

Private investor considerations include 2011 expiration of current 30% Federal tax credit for 3<sup>rd</sup> party investors, but this may be extended. A local bank could front the construction cost, and use the investment tax credit. (Community Re-Investment Act not applicable).

If City owns and builds, we need to confirm whether City must hire an “owner’s project manager” under terms of State construction bidding laws. (Required for most projects costing \$1.5 million and up, unless special legislation exempts). Donna Compton, City’s procurement officer, should be consulted.

**Boreal's conclusion** was that there are no critical flaws with utility-scale wind project at Blackburn site. Project is able to be permitted and has significant economic and environmental benefit. Boreal recommends that City pursues the project further. Next steps include:

- a) decide on size range of turbine
- b) initiate discussion with Varian
- c) design/implement public outreach program
- d) engage VSEA and/or quarry owner for access easements
- e) procure project management team for design/construction phases
- f) apply for block 6 MassCEC design/construction grant up to \$400K
- g) proceed to permitting, engineering and construction phases

CEC stated that Boreal should complete the business plan report prior to a meeting with Mayor Kirk, who approaches decisions on wind turbines like a financial analyst. CEC must prepare information for her and Community Development Dept. with that in mind. Greg Cademartori has already put the Blackburn project and Bond Hill project on City Capital Improvement Plan, and Mayor noted this could be a revenue generator.

In working with City on turbine projects ownership and financial arrangements, CEC should coordinate the end of the Suez electricity contract (June 2012) with the creation of power purchase/net-metering agreements for turbines. (With net-metering, City can specify up to 100 accounts that it is applying wind power credits to, or National Grid could just write City a check for the turbine power fed into the grid). Under current Suez agreement, City-owned renewable generation is NOT allowed. We could apply a net-metering credit to the City's National Grid bill, but could NOT apply credit to City's Suez bill, UNLESS Suez would allow National Grid to bill their share. When City goes out to bid again for electricity, we should make sure net-metering is part of any new contract.

### **Energy Manager Status Report**

Sam Cleaves announced that Energy Manager Susan St. Pierre would be starting her new part-time job as a grant administrator for North Shore Community College. CEC members expressed deep appreciation for Susan's work in Gloucester. Discussed possibility that Susan's part-time status in new job would allow for some continued involvement with CEC. CEC hopes that while Susan is still available, we can schedule meeting with Mayor Kirk and Boreal to discuss moving forward with Blackburn project, and also discuss Magnolia Woods and private projects.

RE Magnolia Woods, Susan reminded CEC of meeting sponsored by City Councilor Greg Verga on March 5 with residents of Ward 5 re Magnolia Woods proposal, and whether support can be obtained to urge Budget/Finance Committee (March 17) and City Council (March 22) to accept MassCEC grant for meteorological/feasibility study at Magnolia Woods. Several CEC members will attend. Susan and Sarah

Garcia will also attend. Greg C. and Sam reviewed the CEC powerpoint on the history of renewable energy efforts in Gloucester, which will be presented at Ward 5 Meeting. Will emphasize that City Council asked CEC to identify good wind sites in Gloucester, and Magnolia Woods was one of them.

CEC/Susan noted one Magnolia Woods issue is its designation as a "Park/Recreation Area. Does Mass Constitution Sec. 97 requirement apply, requiring 2/3 vote of Legislature to allow any non-park use of land? Greg C. is researching this. Candace Wheeler mentioned that when Town of Hamilton wanted to site a municipal well in conservation/park land, it was determined that Sec. 97 DID apply, and Legislature's release would be required.

**Next Meeting is Tuesday, March 22.** Coincides with City Council vote on whether to accept Magnolia Woods grant.

Respectfully Submitted,

Candace Wheeler (Jill Buchanan was away)