

Gloucester Energy Commission
11/23/10 meeting

Attending: Sam Cleaves, John Moskal, Jill Buchanan, Linda Saunders, Tom Balf, Candice Wheeler.

October Minutes approved

Public comment: Mary Beth Vogel and partners in attendance, agreed to discuss their idea on i4c2 and on the waterfront ideas at the December meeting.

Welcome to Steve Patterson- Director of Customer and Community Development at Flo Design. Company has focus on major wind resources (center of country) and also smaller-scale community projects like the one they are proposing for Gloucester. Currently has pilot money from Massachusetts Clean Energy Center, and is exploring the possibility of implementing pilot wind project in Gloucester. They have a grant of \$340K for each of the five turbines funded under the project. That leaves a balance of \$100 - \$200K per turbine as a balance for the city to cover.

Background: Company works with jet engine and wind turbine experts to create a new design with smaller rotors, reduced dynamic load (smaller blades, smaller design), able to use lower cost materials. Their new turbine design is 152-foot height at highest point- 100 kw. (50 houses worth of energy) Production of new turbine, on low side 200,000 kwh per year per turbine, up to 300,000 Capacity= 40% (25-30% better than other land based turbines). Design enhances performance. Designed for a 20-year life span. Maintenance to be provided free of charge by Flo Design would be included in the first 7 years of the agreement with the City.

Benefits: They could deliver energy to the city at a fraction of the cost of coal-generated energy. They are quieter. Birds and bats see it as an obstacle, so less impact on wildlife. Other problems this model addresses: Works well in populated areas. Smaller size, improved safety (ice), lower cost to build.

Location: FloDesign looked at high school and Bond Hill, where there could be 4 turbines next to the cistern.

Timeline: FloDesign would like letter of intent, which would include a work plan and address potential financial issues, engineering issues. Timetable for permitting, etc.

Financing: Questions: should we explore existing non-profit entity or consider creating a new one? Investors will get their investment back in a year. Possibility of finding and utilizing a tax investor. Power Purchase agreement is also an option.

GEC identified a new subcommittee to explore idea: gather resources and info on financial issues and possibilities. Committee will include: Susan St. Pierre, Linda Stout Saunders, Candice Wheeler, John Moskal and Sam Cleaves.

Green Communities:

Susan is revising and correcting technical terms of the Green Communities application to meet requirements. Need to show 5-year reduction plan for minimum of 20% of reduction. Also, Susan is gathering baseline with support from Dave Anderson who has energy savings info.

Committee agreed that once the city is designated as a Green Community, our first grant application for Green Community funds will focus on replacing the Beeman boiler.

Feasibility study: We will soon have a business add-on (financial specifics) for the feasibility study done at the Blackburn site. When we have more financial info and ownership info we'll present it to the mayor.

Magnolia woods –we were awarded a grant of \$89,750.

Meridian will do work on feasibility study here.

Also investigating feasibility of installation of smaller turbines at O'Malley and/or high school.

Rooftop turbine at O'Malley school has been approved, will be up by January. (I am checking on this schedule with Amy)

Green Repair: no word on grant application for schools.

Street lighting: will report to mayor when we have Blackburn site complete report.

Next meeting: December 22, Wednesday.

Agenda Items for December meeting:

Community Outreach: discuss a plan for a vendor fair.

Discuss financing information that Linda S. gathered.

MaryBeth Vogel to explain their plans for I4C2 and other Gloucester projects.

Action Items:

AI: Susan St. Pierre: gather Weibull distribution wind data at 38 meters production from Blackburn site for Steve from FloDesign

AI: John Moskal will look at our TransCanada (electricity supplier) agreement to make sure this wouldn't impinge on our purchase agreement with them.

AI: Linda S. to contact Susan St. Pierre to discuss finance issues relating to the WindFlo project; set up a conference call with someone at CEC, include Suzanne Egan on this call. How can FloDesign help create an LLC? Use EDIC as nonprofit entity (Does the city have an entity that can invest)?

AI: Susan St. Pierre: assemble data on MET tower at Blackburn. Same as AI above re: Weibull

AI: WindFlo subcommittee to meet before next meeting, and if initial research is positive, begin to create a Letter of Intent for the project.