## Alternative Energy Committee February 7, 2012

Present: Jim Littlefoot, Tom Kacandas, Laura Petit

Mr. Kacandas said that in order to have efficient wind turbine energy, winds would have to be a steady 6-7 meters per second (11-12 mph) minimum. There was discussion on wind turbine fields in the north western part of New York. The largest private wind investor in North American is Michael Polski who developed most of the wind farms in New York.

Questions on wind turbine feasibility: Meteorologist study for approximately 1-3 years to complete a wind study; would SUNY be willing to partner?; RPI developing radar technology to measure fluctuations in wind speed.

Mr. Littlefoot thought that a wind turbine representative should be solicited to install one turbine as a test which would create good PR and offer educational opportunities.

First steps for alternative energy:

- EFFICIENCY: changes in usage by staff including occupancy sensor; efficiency changes to heating systems, insulation
- Renewable Energy "We need to reduce dependency on outside sources by using onsite generation"

Suggestions for efficiency changes: What does a facility/building need to do? Facility energy audit, reduce load, staff training. Consider change in operations (actual day to day activity).

Stewart's Shop on Route 32 has just installed high efficiency LED lighting.

Committee requested breakdown of kilowatt usage including all town buildings, police station, water/sewer treatment, street lighting etc. Need monthly, annual, and daily average. Ms. Petit will do the spread sheet and try to get kilowatt usage information from the New Paltz School District.

The next meeting will be held on February 14<sup>th</sup> at 10:00am

<u>I am way ahead of you Tom</u>- ( good information ) that you sent and I appreciate your investment and input.

I was up last night till 4 am going through a lot of information- today spent 4 hours surveying & driving and getting maps from the town--

Found two spots to put up solar panels-- one is Clearwater road (dump) 189 acres owned by the town. It's secure, in a sense for Vandalism and cameras can be put up and connect to the PD office which they the town are going to do anyway. I also have a updated map from DEC concerning Clearwater property of all the ponds on that property which the town does not have.

The other spot is Fire station 2 north putt & Henery De-Boise road 4.5 acres, no trees and is protected still need a camera installed for vandalism. This property is owned by the NP fire Dept. All they do with that area is cut the grass.

The HS is the third option plenty of open space- but prone to vandalism unless many cameras are installed. I question this spot.

There are no other spots in NP town or village that is secure enough- to install these solar panels. I do not want to piece meal this into several spots. You have more control & security if its all in one area.

I am still going to try to see if Honeywell will install (3) wind mills on top of the HS as a pilot program (free) its good promotion for them. Laura and I will address it.

Laura, just having a difficult time connecting to the company (not the supplier). But you can bet this will be accomplished one way or another. Next meeting February 14 at 10 am. Hopefully the rest of the people will come, if not, we, you Laura and I & Craig will go ahead without them. I understand they all have jobs.

Laura will have the first meeting notes ready for the Feb 14 meeting to hand out. I am hoping Laura will have all 4 schools electrical usage at the next meeting. Then we can put it all together and see how much room we need to accomplish the goal

So to rap this up solar is the way we will go. Jim Littlefoot

In a message dated 2/10/2012 11:28:53 A.M. Eastern Standard Time, tom@solaradvantagesolutions.com writes: Hi, Jim,

I encourage you to become as educated about wind power as you want - it's very interesting technology. That said, I don't think your statement is correct.

The physics of wind don't change whether it's a small turbine or big turbine; the only

The physics of wind don't change whether it's a small turbine or big turbine: the only thing that changes is whether you get zero power (because cut-in speed to start the turbine is

more than available wind most all the time) or very little power. And in fact, the way wind turbines require insfrastructure to be installed, very little power is almost always not enough to justify the investment, which is just a financial measure. But it is also a way of saying it's not worth the environmental cost of digging up and refining the metals, oil to ship, energy in labor and organizing construction, etc.

Endurance turbines are actually small/medium turbines. Anything smaller than that has less output than a house sized solar system, which doesn't get us anywhere near cutting electric bills for a high school or anything bigger than a small house. Yes, you could use more than one, but wind turbines have to be spaced out or they interfere with each other. The wind sales person wrote about the amount of wind:

"it is still not sufficient to install any of our wind turbines.

Maybe solar energy might be a better option for this area?"

I will share some more information that helped me understand years ago that wind was a dead end, ineffective use of time or money anywhere near New Paltz that you would be allowed to put one. To be more graphic, a small turbine that was 80-feet above Mohonk's Smiley Tower might be a reasonable investment - anywhere else that isn't over toward peaks in Ellenville doesn not have anough wind enough hours of the year to make this worth the effort you're putting into it. I love wind power, but will be focusing my volunteer time on solar and efficiency relative to town's operations because of this basic lack of wind. If you think all the other data is wrong, then we should get someone to set up an accurate wind measurement system and get some more specific data. If we're not making decisions based on data, we're doing the best we can for our tax situation and observing citizens will conclude renewable energy is a waste because wind is a waste in this location - and that's just the wrong conclusion because solar and efficiency work great right here.

I wish we had more wind here to allow turbines to help us out.

## **Tom Kacandes**

Chief Solution Provider
Solar Advantage Solutions
New Paltz, NY
tom@solaradvantagesolutions.com
(845) 750-2915

"Get the Solar Advantage"tm

-----Original Message-----

From: NavajoJL@aol.com [mailto:NavajoJL@aol.com]

Sent: Thursday, February 9, 2012 09:51 PM

**To:** cs3536@msn.com, tom@solaradvantagesolutions.com, roxylbp@yahoo.com

**Subject:** Fwd: Information Requested | New address

You must remember these are the **big turbo's** nothing to do with the small ones.

From: info@endurancewindpower.com

To: NavajoJL@aol.com

Sent: 2/9/2012 7:47:46 P.M. Eastern Standard Time

Subj: Information Requested | New address



o Jim,

checked the new address you provided, and though the wind speed is a bit higher, with m/s at a height of 35 m it is still not sufficient to install any of our wind turbines.

be solar energy might be a better option for this area?

Sincerely,

Ana Kozjak
Customer Service Representative



#107-19052 26th Avenue

Surrey, BC, V3S 3V7, Canada

Direct: +1-604-579-9434

Office: +1-604-579-WIND(9463) Fax: +1-604-542-WIND(9463)

Toll Free Customer Service: 1-888-440-4451

## **Contact Details:**

Jim Littlefoot NavajoJL@aol.com 845-255-0725 69 Shivertown Road, New Paltz, NY, USAFrom: NavajoJL@aol.com

[mailto:NavajoJL@aol.com] **Sent:** February-09-12 1:46 PM **Tax.** info@and.represented by the second discounter of the seco

To: info@endurancewindpower.com

Subject: Re: Ana Kozjak

The wind turbo, is not for me- we are investigating for the town of New Paltz- 12561High School South Putt Cornners--Clearwater

road NP dump, route 299 going to Minnewaska state park and other areas- we want to get off the grid at least by 80%, I have been instructed by the town supervisor Susan Zimet to find a solution- for this year. Believe me I will! If you need a town map- will be glad to send you one. (
The High School is not more than 100 yards from NYS thruway. Jim Littlefoot