

**Small Wind Working Group Meeting
August 10, 2010
44 So. Clinton Avenue
Trenton, NJ (1st Floor Multi-purpose Room)
9:30am to 12:30pm
Meeting Notes**

Welcome and Introductions: Scott Hunter, Renewable Energy Program Administrator, NJ Board of Public Utilities, and Office of Clean Energy

Budget Process 2011, Vision for small wind and policy – Mike Winka, Director Office of Clean Energy, NJ Board of Public Utilities, Office of Clean Energy

Mike Winka discussed that the Governor directed BPU and DEP to review the Energy Master Plan and that both departments was currently in the middle of the process. There was a task force assembled and a Public stakeholder process to start shortly.

Board is considering how to handle the NJ Clean Energy Program in the future. A caucus is starting the process through an open public meeting with dialog among the commissioners. The purpose is for the commissioners to exchange their thoughts and ideas on the NJCEP.

Budget process was just starting for 2011 and Mike Winka discussed this process and mentioned the need to reduce the administrative costs. The future is to move away from rebates and determine what legislative structures are needed so that we still get growth in both energy efficiency and renewable energy.

Board order set a 4 year plan - \$319.5 million is the 2011 budget but \$52M has already been appropriated (\$42M for state energy costs and \$10M for energy efficiency of state facility buildings) plus \$25M from Social Benefit Charge is going to be used for NJ shares to help low income residents pay their heating bills. This takes \$77M off \$319 Million budget which leaves \$245 Million.

\$80 million is being allocated for residential EE – \$30 for low income and 50 million for whole house EE.

\$80 million for Commercial and Industrial

\$40 mill for EDA – \$20 million for financing programs through EDA

\$22 M for Renewables – \$7 mill for solar and admin, \$10 million for large non solar grid projects and \$5 million for behind the meter non solar.

\$25.5 million is for competitive grant for market segments. – Something that the current president Lee Solomon would like to see expand.

Budget process starts on August 17th and we need to transition away from rebates over the next two years. The goal is to move away from rebates to financing so the funds get replenish through other sources other than the Societal Benefit Charge (SBC).

In regard to the wind program, Mike said that Senator VanDrew has proposed tweaking the solar carve out to assist the other renewables or have a small wind carve out. The board will be sitting down with him to discuss this further.

Mike also said that some of the recent discussions have mentioned that maybe we should have a NJ REC that would include all off shore wind, local wind, biopower and others.

Senator Van Drew feels that NJ has created an unequal market for renewable energy from a financial perspective. Class 1 recs are trading at less than \$10 per rec.

Mike stated that solar REC's prices will be coming down to a reasonable amount once the market is balanced because the \$680 per SREC price is too high. In 2009 only 55% of the LSE fulfilled their obligation with SREC and 45% with SACP and in 2010 it is anticipated that they will satisfy 2/3 with SREC's and only 1/3 with SACP.

Mike also stated that the DEP has requested that the BPU wind budget for 2011 fund the 1st 15 bird mortality studies. Currently, the BP has not allocated funding for these studies.

Still need direction from the DEP on the CAFRA projects. Small wind should not be affected by bird studies. Initial discussions with the DEP on the CAFRA projects show that the heights proposed are ok but the swept area proposed is limited. They used Ocean Gate's situation for determining rules but that is not the normal situation.

Legislative Updates for Wind in NJ - Roger Dixon, President Skylands Renewable Energy

1. State Agriculture Development Committee – implement Renewable Energy on farms under the Right to Farm Act – Currently there are some rules for solar preserved farms however they have not discussed wind turbines on farms. There is a meeting to discuss this later in the week.
2. S2528/A3740 – regulations of small wind energy systems by municipalities, once challenged if it too restrictive the court tells the municipality to rewrite the ordinance. Wayne NJ had Wayne auto spa challenge them and Wayne auto spa was able to win this case.
3. Sales and use tax issue registration for all RE not just solar. The 1997 law only exempts solar renewable energy and leaves out wind. They are working to get this changed.
4. S2116 – allow renewable system to be permitted use for quarries and landfills. Except in the pinelands regions.

5. A3142/S2196 – Assembly C – replace S2535 – replace LRECS – limited pilot for Class 1 renewables – LGREGE – Local government renewable energy program.

Small Wind Certification Council Update -Mark Loeser, Market Manager NJCEP, Alma Rivera Office of Clean Energy

Mark Loeser reviewed a presentation developed by the Small Wind Certification Council regarding the North American Small Wind Turbine Certification program. The small wind certification council has developed a new independent, third-party certification body to serve North America. Its purpose is to certify that small wind turbines (SWTs) to meet the requirements of the new AWEA *Small Wind Turbine Performance and Safety Standard*. This can be used as state-level eligibility measure for wind rebate and incentives. The turbines that are currently pending certification include:

Manufacturer	Turbine
American Zephyr Corporation	Airdolphin GTO
Bergey Windpower Co.	Bergey 5kW
Bergey Windpower Co.	Bergey Excel-S
Cascade Engineering	Swift Wind Turbine
Endurance Wind Power Inc.	Endurance S-343
Eveready Diversified Products	Kestrel e400i 3kW 250 V
Eveready Diversified Products	Kestrel e400i 3kW 48Vdc
Renewegy, LLC	Renewegy VP-20
Seaforth Energy	AOC 15-50
Southwest Windpower	Skystream 3.7
UrWind	UrWind O2
Ventura Energy Corporation	Ventura VT10
Windspire Energy	Windspire – 800040
Xzeres Wind Corporation	ARE442

Scott Hunter asked the stakeholders what they thought of including only the certified turbines in the NJCEP REIP wind program. It was discussed that we should definitely include these turbines in our program once they are certified but it was mentioned that the list is very small and many of the turbines that we install in NJ are not on the list. It was recommended that we find out how the other states are planning to use this data. Maybe we restrict the turbines in EPBB to this list and others would only participate in the Innovative Wind Technology Incentive? Scott Hunter said that the state has an applied endorsement if we include them in the program and we need to have performance assurances.

Action: Market managers should research what the other states are going to do with this and then discuss this again once the turbines are certified

NJCEP REIP Program Update: REIP Application forms and Wind Alternative Calculation Method (WACM) Joanne Bachmann, Market Manager

Joanne Bachmann reviewed the current budget available versus applications approved or in the process of getting approval. Of the \$4.5 million biopower and wind budget we only have about \$435K left for new projects in 2010. Joanne also mentioned that the forms have been updated and the checklist provides much more detail about the EPBB calculation method and how to handle turbines not on the approved list.

The turbine approved list has been updated to include the GE 1.5MW and 1.6MW as we are getting more interest in the larger systems and need to include those to make our Renewable Portfolio Standards (RPS) requirements.

The Wind Alternative Calculation Method for turbines not on the pre approved list is the way to currently include vertical wind turbines in the program but it has not be used. The MM has not received any applications using that alternative calculation method.

It was discussed that this would go away once the Innovative Wind Technology Incentive was approved in the 2011 program plans. Feasibility studies are also being added to the 2011 program plans.

Wind and Sound – Ocean Gate Update - Jim Fry, Resident, Township of Ocean Gate

Ocean Gate – 8 to 9 residences have complained about the turbine's noise. DEP has no equipment to analyze the noise issues and refers to the health department. When the turbine shuts down it does make noise.

Now have logged data – there was a 911 call – noise is not an issue of safety. Ocean Gate had a public meeting to clear up any misinformation. There were 10 people that showed up with one principal person who was very emotional. Currently the health department takes the readings and it has been about 60dba during the day and 50 dba at night. There were no reading greater 55dpa at night.

Wind Resource Map Update - Mark Loeser

The program had required three mapping sources to determine the average wind speed at the location. Now two of the three resource maps are no longer FREE and require a subscription.

Recently two companies presented at the Wisconsin small wind conference. Their software includes both the resource maps and the expected performance in kWh of the turbine. They are:

Cadmus Group:

- Massachusetts uses this organization for wind maps and estimated performance
- Found at <http://cwest.cadmusweb.com/>
- Provides Wind Rose and wind data for location
- Allows for variable in vegetation and terrain roughness

New Roots Energy:

- Self-populating wind speeds using 3Tier wind layer data
- Lat/Long positioning and report visualization using Bing Maps
- Calculation of federal, state and utility incentives for the entire United States
- Power production calculation using manufacturer verified power curves
- Accurate financial and equipment configuration comparisons
- Free for 1st year – 10K per year.

Scott Hunter said that the MM should give the BPU a full list of alternatives. We may be able to add this annual software fee to the Rutgers State data center contract once we choose the right vendor for NJ.

Action: MM to develop this list for the BPU

Other Discussion/Comments:

20kW Jacobs – having issues with the product – turbine manufacturer is not responsive. Roger recommends that we remove them from the program. New inverter is not functioning well. No longer have a verified power curve. Need to call customers and contact Jacobs.

Expand the existing incentive program to be less restrictive. Reduce some of the requirements and also the incentive.