



Innovative Wind Technology Incentive

Developed with the cooperation of the
Small Wind Work Group

And

Innovative Wind Technology Manufacturers

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2010 Program Plan Considerations



- There are numerous manufacturers that are interested in entering the NJ Wind Market
- Vertical Axis Wind Turbines (VAWT) are making the greatest push
- Advantages of VAWT are numerous, but there is very little operational data
- If the technology is proven viable they will help meet the RPS
- This incentive has been developed for all wind turbines that are non-conforming to Program recommendations



2010 Program Plan Considerations



Develop a post installation Performance Based Buydown (PBB):

- Requires Certified Power Curve from independent 3rd party
- Incentive must go to installer or manufacturer
- All rebate caps apply
- Production data would be public information
- Rebate calculated on Mfg power curve but payment based on actual quarterly production data starting three months after commissioning
- The estimated production from manufacturers power curve should be given a tolerance of +/- 10% at years end.
- Deviation from this allowance would reduce the incentive at the \$3.20/kWh as an incentive to provide the best estimate of production.



2010 Program Plan Considerations



Develop a post installation PBB

- Institute a Wind Technical Work Group made up of interested stakeholders that would do the review of turbine production and anemometer data
- Rebate will not go up but may come down
- ANSI C-12 meter must be installed to record production
- An anemometer will be required to correlate production to wind speed data.
- No limit on the number of projects in the Program
- Develop a NJREMI incentive for 50% NJ content needs to be clearly defined so the manufacturer will be able to accurately calculate their ROI and the amount of initial investment.



Example 1



Assumptions:

10kW VAWT

12 mph wind speed at 50m

4 mph wind speed at hub height (mid-plane of VAWT)

Estimated performance = 10,000 kWh / yr

Maximum rebate = \$32,000

Q1 actual performance = 1,000 kWh = \$3,200

Q2 actual performance = 2,000 kWh = \$6,400

Q3 actual performance = 3,000 kWh = \$9,600

Q4 actual performance = 2,000 kWh = \$6,400

Total incentive paid = 8,000 kWh = \$25,600



Example 2



Assumptions:

10kW VAWT

12 mph wind speed at 50m

4 mph wind speed at hub height (mid-plane of VAWT)

Estimated performance = 10,000 kWh / yr

Maximum rebate = \$32,000

Q1 actual performance = 2,500 kWh = \$8,000

Q2 actual performance = 3,500 kWh = \$11,200

Q3 actual performance = 3,500 kWh = \$11,200

Q4 actual performance = 3,000 kWh = \$1,600 Incentive cap

Total incentive paid = 12,500 kWh = \$32,000

