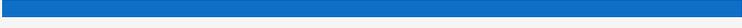




WIND TURBINE ALTERNATIVES

Report #2

September 9, 2013





General Overview



Wind Turbine Alternatives

Report #2 – September 9, 2013

- Encouraging informed review, discussion, reflecting community sensitivity, delaying a definitive decision for multiple years.
- A decision must be made soon or the TOWN is in jeopardy of having decisions made by others.

On August 12, 2013 the Board of Selectmen voted to affirm:

- BOS Requested that staff further detail and articulate the mitigation options for
 - 20 Hour Operation for Both Turbines
 - 16 Hour Operation Wind 1 & 24 Hour Operation Wind 2
 - 20 Hour Operation Wind 1 and 24 Hour Operation Wind 2
 - Full Operation Both Turbines
- As per Town Counsel, responsible resolution must include a mitigation component
- Preferred alternatives include production exceeding 80%, staff will suggest a package of mitigation options – Only in these cases do wind turbine revenues support the creation of a reasonable mitigation fund.
- The anticipated timetable for implementation includes an operational decision in September with implementation beginning in October, 2013.



Wind Turbine Alternatives

Report #2 – September 9, 2013

Whatever decision is made, the Board of Selectmen will have to take the lead, with assistance as required, to advance the decision with the community and the neighbors.

This is clearly in the community's best interest.



Sound/
Acoustic
Easements



A sound/acoustic easement plan is an affirmative response to the complaints of neighbors who may reside near the Town's turbines.

In some of the cases requested for review, modest curtailment is proposed in addition to proposed easements.

- 
- Report #1 established that operations in excess of 80% production is necessary to generate sufficient revenue to fund sound/acoustic easements
 - Data logged and collected clearly indicates that distance matters.

- 
- A fund for acquisition of easements and exploration of settlement of existing claims recommended –no less than \$520,000
 - Town appointed Facilitator to address details of all matters related to distribution of funds, excluding those in active litigation.
 - 25%-33% of net revenue after expenses recommended for this purpose.



Estimated Financials*

for Wind Turbine Operating Scenarios

Prepared by Sustainable Energy Advantage, LLC

Estimated Financials* for Wind Turbine Operating Scenarios

Scenario Name -->	Both Turbines, 20-Hour Operation	Wind 1 16-Hour Operation, Wind 2 24/7 Operation	Wind 1 20-Hour Operation, Wind 2 24/7 Operation	Both Turbines, 24/7 Operation
Est. Production (MWh), by Case	6,306	6,284	6,834	7,513
As % of Uncurtailed Production	84%	84%	91%	100%
Net Cash Flow:				
FY 2015	\$59,872	\$88,802	\$155,065	\$220,117
FY 2016	\$64,769	\$93,318	\$159,238	\$223,952
FY 2017	\$55,775	\$84,269	\$148,300	\$211,134
FY 2018	\$56,740	\$85,145	\$148,106	\$209,868
FY 2019	\$187,079	\$215,382	\$277,537	\$338,485
FY 2020	\$216,348	\$244,441	\$308,973	\$372,266
FY 2021	\$244,973	\$272,861	\$339,710	\$405,294
FY 2022	\$285,257	\$312,878	\$383,650	\$453,109
FY 2023	\$304,823	\$326,098	\$401,446	\$475,430
FY 2024	\$284,224	\$305,268	\$384,230	\$461,786
FY 2025	\$317,598	\$338,434	\$420,374	\$500,872
Funds Available for Operation and Mitigation	\$2,077,456	\$2,366,895	\$3,126,630	\$3,872,313

Fund Revenue Analysis

			Wind 1 16 Hour Wind 2 24/7	Wind 1 20 Hour Wind II 24/7	Full Production
	Both Turbines 20 Hour Operation				
		0.84	0.84	0.91	
25% \$	519,724		\$ 591,723	\$ 781,657	\$ 9,680,78
33% \$	685,560		\$ 781,785	\$ 1,031,787	\$ 1,277,863

Basic Recommended Operating Plan

- The Town's actions may include curtailment
- Flicker curtailment is not recommended in addition to time of day curtailment
- Fund revenue is determined by the characteristics of each operating plan
- The Town shall request a contribution from the State/State agencies and others
- MassCEC sponsored Sound Study
- Establish a zone for sound /acoustic easements, suggested to consider all homes within 1/3 mile of turbines with impact diminishing by distance
- Homeowners grant sound/acoustic easement and execute a release of all claims
- A facilitator/representative will have the authority to negotiate individually with each party
- Facilitator limited only by the funds available, and may negotiate and effectuate;
 - Voluntary Sale
 - Sound easements and release of claims
 - Compensation may be used at the discretion of the owner

Alternatives

1.) 20 Hour Operations Both Turbines

Includes 8 hours total of curtailment per 24-hour day

\$520,000 (25%) initial funding to be supplemented by others as feasible

2. Wind 1 – 16 Hours/Wind 2 -24 Hour

Includes 8 hours total of curtailment per 24-hour day

\$590,000 (25%) initial fund to be supplemented by others as feasible

Alternatives

3.) Wind 1 20 Hour Operation/Wind 2 24 Hour

Includes 4 hours total of curtailment per 24-hour day

\$780,000 (25%) initial funding to be supplemented by others as feasible

4. Full Operation

Mitigation of Sound at 211 Blacksmith Shop Road will be required.

\$968,000 (25%) initial fund to be supplemented by others as feasible

Next Action Steps

1. Board of Selectmen choose a definitive Operating Plan in September, 2013; Implementation effective in October, 2013
2. Appoint a Facilitator/Representative
3. Initiate the establishment of the previously described fund; October 2013 – December 2013
4. Town Meeting Actions
 - Board of Selectmen Authorize Special Town Meeting
 - Appropriation to the Fund
 - Amend Special Legislation if necessary
5. Seek additional contributions from the State and others as is feasible to supplement the fund
6. Seek Confirmation of 0% Interest and Loan Forgiveness
7. Seek Confirmation REC Relief and agreeable terms