

VOTE NO on Article 5: Madaket Landfill Wind Turbine

ARTICLE 5 = INCREASED TAXES TO ALL & ESTIMATED LOSS of ~ \$400,000 over 10 YEARS

Project Cost = \$642,333+ (based on actual costs for the similar High School Turbine from NPS)

Total Financed Cost = \$906,000 (Principal of \$642K + Interest of \$275K @3.5%)

Projected Annual Costs = ~\$80,300 (debt service ~ \$77,200 + maintenance contract \$3,100)

Projected Annual Revenue & Offsets = ~ \$39,000 (energy savings + sale of RECs)

Annual Gap between Costs and Revenue = ~\$40,000 LOSS

Bottom Line: Turbine does NOT pay for itself. Net savings would not cover debt expense.

THIS WIND TURBINE WILL HAVE NO IMPACT ON AVOIDING OR DELAYING A 3rd CABLE

In comments to the BOS last winter the Town's Energy Consultant said the 325' wind turbine "would have no value in deferring the need for a third cable." On a hot August afternoon, peak demand is about 40 MW of the roughly 75MW Nantucket's two cables are capable of providing. The 100KW turbine at the HS produces about 200,000 KW per year, or an average of 22KW/hour, if the blades are spinning. The proposed turbine would provide less than one tenth of one percent of peak demand of 40,000KW.

NO ADEQUATE DUE DILIGENCE HAS BEEN DONE By Any Town Boards, Committees, or Staff

The Finance Committee (7-0) and the Board of Selectmen (4-0) voted unanimously to reject this proposal for a smaller wind turbine. Article 5 is a concept, not a fully analyzed project plan supported by hard facts and figures. We taxpayers are being asked to write a blank check.

MANY COSTS ARE UNDERSTATED or UNKNOWN

>> For example, it is unlikely that the \$3100 for an annual service contract accounts for: (i) periodic overhaul, painting, upkeep; (ii) maintenance needs due to severity of the Landfill environment (sand and salt air); (iii) escalation of service costs in post-warranty years; (iv) costs to remove turbine at the end of useful life.

>> Studies and permits required by Federal, State and Town must be re-done as this is a different machine in a different location. Studies/permits are not transferable from turbine to turbine or from site to site. National Grid requires technical feasibility studies to blend 10% unreliable and variable power from the 100 kW wind turbine with 90% reliable Grid power to support the composter, 24/7. These studies were not done for last winter's wind turbine proposal.

>> Additional costs for site access, preparation and installation (presence of wetlands & environmental conditions differ from the High School site).

REVENUE ASSUMPTIONS ARE OVERSTATED – Cost of Energy & Capacity Factor

The cost of electricity is significantly overstated (\$0.20 vs \$0.129 used in the Energy Study Group's analysis last winter) and doesn't reflect lower cost of electricity shown on the NHS monthly energy bills.

The estimated efficiency rating, or capacity factor (CF), stated by Article 5's sponsor to be 34% is more than 50% higher than the actual operating experience at NHS (21.5%). Therefore, energy cost savings and projected revenues from the sale of RECs (Renewable Energy Credits) are significantly overstated.

MAJOR CAPITAL SPENDING NEEDED at LANDFILL, TOWN CONSIDERING ALL OPTIONS

On Sept 19 the BOS heard a report from the Town Energy Consultant outlining major changes that could happen to services at the Landfill, based on a projected decrease in the C&D business. **An August 2012 Town analysis shows \$4.5M - \$8.5M in new capital spending is needed at the Landfill, some of it in FY2014 at the next ATM.**

Also, within 5 - 7 years (short of when the taxpayers finish paying for the Turbine) a more cost-effective and energy efficient alternative to the energy-intensive composter may be in place. Some of those options are being actively explored. Installing a wind turbine takes away the ability of the Operator and the Town to adjust to new business realities and take advantage of evolving technologies that are more cost and energy efficient than today's composter. **We need to solve tomorrow's problems, not lock in yesterday's solutions.**

NANTUCKET NEEDS A COMPREHENSIVE ENERGY PLAN WITH BROAD COMMUNITY COLLABORATION NOT A PIECEMEAL APPROACH

OVER....

Karen Palmer October 22, 2012