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Wind power is not practical

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Discussion of the proposed windmills on Glebe Mountain has so far focused on aesthetic and environmental issues. I should like to add some comment on the practical and financial aspects of this project. As a scientist I always find it disturbing that the public is often called upon to make important decisions in the absence of relevant data.

Due to the unpredictable nature of wind, the market value of electricity produced by windmills is quite low, at something less than 2.5 cents per kilowatt-hour. Given the high cost of construction and maintenance of windmills such as those proposed, one can reasonably expect the actual cost of the power generated to greatly exceed its true market value, probably costing in the vicinity of 9-10 cents per kilowatt-hour. Clearly wind power is not a practical endeavor and cannot be expected to yield economic benefits to the public as a whole.

In engineering terms, wind power belongs to a class of energy sources referred to as "low-grade energy." In other words, wind power is not a concentrated form of energy, but rather is dispersed or "dilute," since the actual energy of wind "per square foot" is quite low. Utilization of low-grade energy is a classical engineering problem that is well understood, having long been realized to be impractical. Wind energy was made obsolete by the advent of the steam engine more than a century ago.

Given the impractical nature of so-called wind turbines, one may reasonably ask, why would anyone want to build them? The answer has to do with the bizarre economics of regulated utilities. Unlike competitive enterprises that make money by reducing their expenses, regulated monopolies such as utilities increase their long-term profits by increasing their costs. By itself CVPS cannot afford to build the Glebe Mountain project. Instead, they no doubt expect a larger utility to buy their permits, so that the buyer can inflate its costs, raise its rates, and increase its profits — all in the name of renewable energy.

When told that the people of France were starving for lack of bread, Marie Antoinette said, "Let them eat cake dough!" Wind power is the Marie Antoinette solution to the low cost of coal — an abundant resource. Readers who are interested in learning more details about the impracticality of wind power may wish to consult my essay at www.glebemountaingroup.org.

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