

## Wind turbine plant's poor record

Posted by : Kerberos on Thursday, December 18, 2003 - 04:43 PM GMT

A report on the poor performance of Vermont's Searsburg wind project was published in *The Caledonian-Record* of St. Johnsbury (Vt) on December 17, 2003. It is not available on line. It was written by Eleanor Tillinghast, an environmental advocate in southwest Massachusetts, and originally appeared in slightly different form in *The Berkshire Eagle* of Pittsfield (Mass) on November 30.....

The wind project in Searsburg, a southern Vermont town of 85 people, began operation in 1997 and consists of 11 towers with a total rated capacity of 6 MW. It replaced a forested ridge top. Tillinghast examined annual reports of Green Mountain Power (GMP) [available at [www.sec.gov](http://www.sec.gov)], the utility that owns the project (it was built by the multinational enXco), and evaluations for the federal government by the [Electric Power Research Institute](#) (EPRI).

For 2002, GMP reported the plant's output as 1.2 MW in the winter and only 0.5 MW in the summer (when demand is higher). Its average annual output has consistently been less than 25% of its rated capacity and has decreased every year.

During the three years evaluated by EPRI (July 1997 through June 2000), Searsburg generated electricity, even a trickle, only 62.5% of the time. Besides the intermittency of wind, Vermont's notorious weather ("if you don't like it, just wait a minute") took its toll. Tillinghast quotes the person responsible for maintaining Searsburg: "Lightning is the big monster up here on the mountain." Lightning damage was responsible for 24% of all downtime during the first three years. In May 1998 one storm damaged eight turbines. In January 2000, a damaged turbine couldn't be fixed until April because a crane couldn't get up the mountain in the winter.

Wind also caused downtime, with the number of faults increasing with wind speed. Electricity output also decreased with wind speed, which was claimed wouldn't happen.

In all, *each* of Searsburg's 11 turbines was down an average of 83 hours every month (over 11% of the time). GMP reported a maintenance cost four times the industry norm in 2002.

Proponents of the Searsburg project said in 1996 that it would provide 0.5% of Vermont's electricity. In 2002, it produced about less than a third of GMP's production, which provides electricity to only a quarter of the state's population. That's less than 0.1%, one fifth of what it was supposed to provide.

The residents of Searsburg were generally supportive of the project as it was

presented to them, and many of them still say it's a good thing. The site is not prominent, limiting its visual impact. GMP and enXco now want to enlarge the plant. As John Zimmerman, enXco's eastern regional director, told a reporter recently, "Wind has become a serious way to make money." They want to add 22 new 1.5-MW towers that are 1-1/2 times taller than the current ones (requiring lights day and night). The larger project will spread to another mountain in another town. Reportedly most residents oppose it. According to GMP, it may create one more full-time job.

Finally, Tillinghast addresses the challenge of wind advocates: "What is the alternative?" [It's a bogus challenge, of course, because wind power has *no* impact on the use of other energy sources.] She describes the example of the Dallas-based Kimberly-Clark company cutting its energy use by 11.7% since 2000. It would require industrializing 50 mountain tops with wind plants to produce the energy saved by this one company. Tillinghast concludes, "It's time for our leaders to enforce strict pollution controls and help businesses and communities conserve energy, instead of subsidizing an unproductive technology that will forever scar our wilderness."