

Carteret County Commissioners (3/3/08)

Thank you for providing the opportunity for Carteret citizens to communicate with you about the very significant wind power issue. Due to the understandable time limitations for speaking, I am sending you written comments instead. Feel free to email me regarding questions, or to request more technical information.

My name is John Droz, and my wife and I have owned a home in Carteret county for over 12 years. I'm a physicist and have considerable knowledge about the energy business, particularly wind power. I'm also an active environmentalist (for example, I'm a member of the Sierra Club).

In regards to the applicants, Mr. & Mrs. Paul, I do not personally know these people. My understanding is that they are proposing a business venture in Bettie, which they certainly have every right to do. In fact, as a person with a long time investment history, I *applaud* their entrepreneurial spirit.

I propose to the Commissioners that they are faced with two basic issues here:

- 1 - does wind power really work? and
- 2 - when there is a conflict between two sides on a matter like this, which side should the commissioners take?

1 - Does wind power work?

Before that can be answered, here are some basic facts to consider:

- a) **Fact #1:** wind is an unpredictable commodity. *No one* knows exactly how much wind will be blowing in Bettie at 3 PM tomorrow afternoon, much less a week from now. This is a very big deal regarding the electrical grid, as cutting the wind speed in half results in reducing the electrical output by about **90%**.
- b) **Fact #2:** the wind power output at the proposed Bettie facility can and *will* go to zero on *many* occasions.*
- c) **Fact #3:** energy generated from industrial wind power can not be stored, practically or economically. *It has to be used immediately.*
- d) These three facts lead us to conclude that wind power will not likely (in our lifetime anyway) truly provide what is known as Base Load electrical power. (See <<<http://tinyurl.com/2xo238>>> for a brief explanation of Base Load.)
- e) Because of these three facts, as wind power is added to the grid, backup from conventional energy sources (like coal) must also *still be built*.
- f) Even in the short term, due to the complexity of nuclear and coal-fired power plants, they can not simply be "turned down" when wind power is available. In NY (where I'm more familiar with the grid details), hydro power (a clean, low cost, non-fossil fuel energy source) is often cut back instead.

So, since coal-fired power plants must operate 24/7, and since conventional power plants must continue to be built to provide Base Load — *no consequential amounts of CO2 emissions are reduced by wind power!*

And the trivial amounts of emissions that are saved are extraordinarily expensive. Most of this is due to the absurdly high federal and state subsidies for wind power, which (on a per KWH produced) are about **ten times** the subsidies for conventional sources of energy (<<<http://tinyurl.com/367nmm>>>).

And if that wasn't bad enough, all of this is at the expense of many proven environmental detriments. For instance, in the base of every wind turbine is something like a **million pounds** of concrete. The fact is that the manufacture of concrete is the third largest source of CO2 in the United States, so wind power can actually *increase* global warming.

So the short answer is NO, wind power does not “work.” And when I say it doesn't “work” I mean that:

- 1) wind power is **not** a scientifically sound solution to help with global warming, or to provide Base Load power. and
- 2) wind power is **not** a commercially viable source of energy on its own, and
- 3) wind power is **not** environmentally responsible.

Those basic criteria haven't been selected to make wind power look bad, but are what should be used to evaluate the legitimacy of **any** proposed new alternative source of energy. [See *attached Addendum for technical articles about this.*]

Maybe it has been too long since I got out of graduate school, but my recollection of how science is *supposed* to work is this:

When a new idea is proposed as a potential solution of a problem, it is up to the solution proponents to PROVE its efficacy — not the other way around.

Here we have businessmen, investors and politicians *proposing* wind power as part of an energy “solution” to global warming. So the ball is in their court as to providing independent, objective **proof** that wind power **is** a viable solution from all pertinent perspectives. THIS HAS NOT YET HAPPENED. Anyplace!

2 - Why are there two sides on this issue?

This whole matter was initiated by the federal government, and states like North Carolina basically just followed their lead.

Essentially what happened was this:

- a) The Global Warming theory became a hot political item,
- b) So the US Congress decided that they had to do *something* to show us citizens that they were “addressing the problem.”
- c) A concept was invented called RPS (Renewable Portfolio Standard). The idea was to dictate that a certain amount of our electrical energy supply **must** come from “renewable” sources of energy.
- d) Accurately sensing an opportunity to tap into some BIG money, the industrial wind power special interest lobby, heavily influenced the process (some say they wrote the rules for RPS — not that unusual an occurrence).

The theory of using more “renewable” forms of energy seems OK on the surface, *but the devil is in the details*. For example, hydro power, the most inexpensive and least CO2 polluting source of energy we have, has been *excluded* because some environmentalists don’t like what it does to fish for instance.

Nuclear energy is also renewable energy and is by far the most powerful option we have. Yet this also has been excluded from this *political* equation because of concerns about things like what to do with spent fuel.

The fact is that ALL energy sources have shortcomings, and we would be MUCH better off trying to solve the issues with sources that genuinely provide Base Load electricity, rather than spending hundreds of billions of dollars supporting things like wind power that are unlikely to provide economical Base Load power.

The bottom line is that RPS is NOT about helping the environment, and is NOT about benefiting taxpayers, or rate payers. It was principally designed to enrich large business concerns who wanted to feed at the government trough.

As I said before, the fundamental problem with mandating that North Carolina switch to more renewable forms of energy has one profound flaw: as they have defined it, *there are no sources of supported renewable power that really work today*. You’d think they would know better, but no. That’s politics for you.

Everything is being driven by the lobbying of large multi-national companies who stand to make enormous profits from wind power, and by certain environmental groups that do not understand electrical grid realities.

In this matter I submit that the Carteret Commissioners choose to *take the side of their citizens*, rather than that of the investors, state politicians and pseudo-environmentalists, and **just say no**.

If Carteret County simply must have some type of Wind Ordinance, then they should copy the regulations of Trempealeau County, Wisconsin.

In early 2007 their county legislators established a 20 person Wind Advisory Committee. At that point local residents had already brought up over a dozen significant concerns about a proposed wind power project.

Nevertheless, the Committee was assigned the mission of creating a county ordinance that was not based on the dozen or more different objections brought up by local citizens, but rather focused solely on the *health and safety of their county residents*.

The Committee spent many months researching this, and closely studied numerous ordinances throughout the world. Their proposal was accepted by their county commissioners and passed into law in December of 2007.

[To get a copy of this go here: <<<http://tinyurl.com/36mo3y>>>.]

Summary:

One of the things I personally have found to be true is that ***those who don't learn from history are doomed to repeat it.***

I find it humorous that when we see western movies with charlatan doctors peddling wacky remedies, one of our first reactions is to think "how could these people be so gullible?" In fact I've often heard someone say something to the effect: "if I was there then I would speak up and expose those frauds." Right.

In reality the scams that happened then were actually *quite sophisticated*. Most people were taken in, and it was due to a series of clever tricks and stunts used by the "medicine" peddlers.

For instance, the larger traveling shows employed smooth talking advance men to herald their arrival. They often entered town with circus-like fanfare, typically with a band leading a procession of professionally decorated wagons. Skits and other diversions were used to attract audiences, and to lower sales resistance. Clearly this cost a lot of money, so one of the initial subconscious impressions was that they must be successful to afford all this extravagance.

The gathering was eventually treated to the spiel — which was carefully given the academic name: the "Lecture". [Interestingly, when medicine shows eventually expanded into radio, these pitches actually became the commercial.]

During all this, some assistants moved through the crowd garbed as Quakers to lend an air of moral respectability to the affair. Shills were paid people who stood up and gave enthusiastic testimony as to the effectiveness of the phony product.

Native Americans were frequently recruited to promote the notion of "natural" or environmentally friendly medicines, which were given names like Wright's Indian Vegetable Pills, Seminole Cough Balsam, or the Amazing Kickapoo Juice.

So here we are, many years later, and *supposedly* much more worldly wise. **Are we really going to buy this snake oil from the hucksters of 2008?**

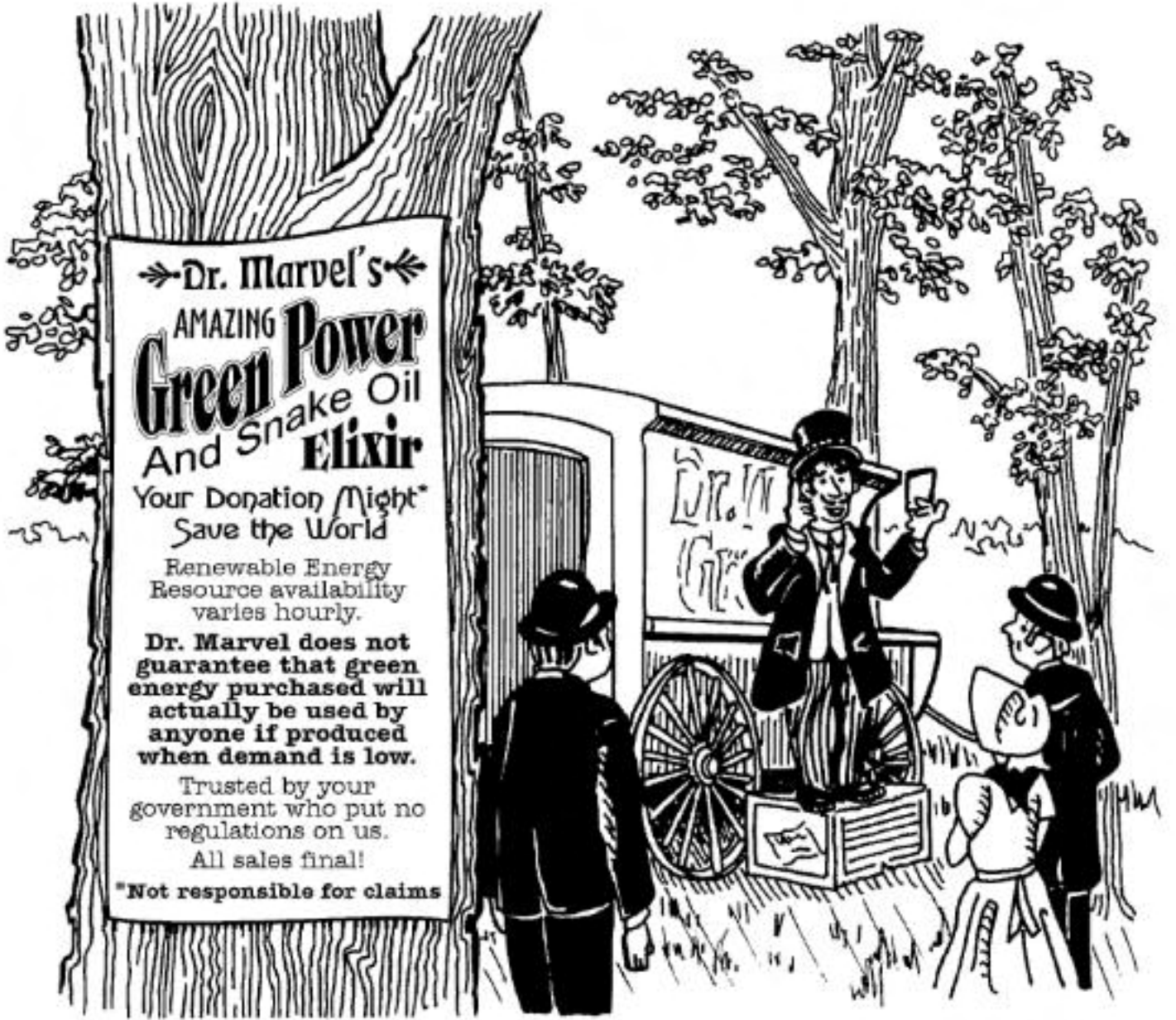
Thank you.

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— ADDENDUM —

Suggested Minimum Reading About Wind Power

These are taken from my *Getting Up To Speed on Wind Power* package of materials. Please remember that these are *technical* discussions which must be read very carefully.

1 - Overview of Industrial Wind Power —

- a) “Industrial Wind — A Bill of Goods” <<<http://tinyurl.com/2oz53f>>>
- b) “A Problem With Wind Power” <<<http://tinyurl.com/3bhyt6>>>
- c) “Where is Energy Going” <<<http://tinyurl.com/3623en>>>

2 - re Wind Power not being Scientifically Sound —

- a) “Wind Energy: Facts and Fiction” <<<http://tinyurl.com/38gg26>>>
- b) “Options for Coal Fired Power Plants in Ontario” (esp ¶ #5.2 thru 5.4, & #8.4) <<http://www.cns-snc.ca/media/CNS_Position_Papers/Ontario_coal.pdf>>
- c) “Estimation of Real Emission Reductions Caused by Wind Generators” <<<http://www.windaction.org/?module=uploads&func=download&fileId=836>>>
- d) “Reduction in CO2 Emissions” <<<http://www.ref.org.uk/images/pdfs/Whiteco2.pdf>>>
- e) “Tilting at Windmills” <<<http://tinyurl.com/2omsn8>>>

3 - re Wind Power not being Economically Viable on its Own —

- a) “Big Money Discovers Wind Power” <<<http://tinyurl.com/2vhaj4>>>
- b) “Distorting the Wealth of Nature” <<<http://tinyurl.com/367nmm>>>
- c) “Calculating the Real Cost of Industrial Wind Power” <<http://essexcountywind.files.wordpress.com/2007/12/wind_cost_report-pdf.pdf>>
- d) “Money Blowing in the Wind” <<<http://www.cmaq.net/en/node/28374>>>.
- e) “Wind Power: Facts or Blowing Hot Air?” <<<http://tinyurl.com/2pyya4>>>.

4 - re Wind Power not being Environmentally Responsible —

- a) “Problems of Wind Power” <<<http://www.ncpa.org/studies/renew/renew2e.html>>>
- b) “The Overlooked Environmental Cost of Wind Generation” (Wolverton)
- c) Evaluation of Environmental Noise (rev 2): <<<http://tinyurl.com/32g3z9>>>
- d) “Nuclear and Renewable Heresies” <<<http://tinyurl.com/2q6b6w>>>.
- e) Wind Turbine Syndrome info <<<http://www.ninapierpont.com/?s=wind>>>.

Here is a good source for definitions of some terms frequently used in the energy business: <<<http://www.aweo.org/windunits.html>>>.

For a better understanding of Nuclear power see this recent Hillsdale College article: <<<http://www.hillsdale.edu/news/imprimis/archive/issue.asp?year=2008&month=02>>>

*For an example of the unprecidatability and unreliability of wind power, see what happened in Texas on February 28th, 2008: <<<http://tinyurl.com/23lrxz>>>

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