

February 2, 2007

No, President Bush did NOT state that wind could supply 20% of US Electricity

For years, lobbyists and officials from the wind industry, US Department of Energy (DOE), NREL, and other wind advocates have overstated the benefits of wind energy and understated its true costs. Unfortunately, their exaggerations have been effective in winning huge tax breaks and subsidies for the wind industry – at the expense of ordinary taxpayers and electric customers.

Most of the advocates' exaggerations are somewhere between annoying and despicable. Occasionally, they reach even further. Such is the case with FALSE claims during the past few months by DOE officials, a former FERC Chairman, and other wind energy advocates that President Bush stated that “wind energy” could supply 20% of US electricity needs – a statement that, if he really had made it, would have been outrageously wrong.

The False Claim – by DOE and others

The following sentence appears on page 2 of “Wind Power Today,” a 12-page pamphlet issued in May 2006 by DOE’s Office of Energy Efficiency and Renewable Energy (DOE-EERE):¹

“On a tour to promote the new [Advanced Technology] initiative, the President stated, ‘If the technology is developed further...it’s possible we could generate up to 20% of our electricity needs through wind...’”

Virtually the same false claim has been made by others, including the following:

- DOE Secretary Sam Bodman’s prepared remarks for a renewable energy conference in St. Louis on October 11, 2006, said, “The President has said that wind could potentially account for up to 20 percent of our nation’s generating capacity by harnessing the power of rural America...”²
- Former FERC Chairman, Pat Wood, who is now Chairman of UK-US “wind farm” developer, Airtricity, Inc’s North American Advisory Board stated in an April 4, 2006, press release that: “I agree with President Bush’s recent observation that wind energy has the potential to supply up to 20 percent of our nation's electricity.”³
- Former DOE Assistant Secretary Dan Reicher (Clinton Administration) is quoted by Matthew Wald in a December 28, 2006, story in the *International Herald Tribune* as saying that: “President George W. Bush has also said that wind could supply 20 percent of the nation's electricity.”⁴
- Professor Jonathan Miles, leader of the DOE-NREL funded “Virginia Wind Energy Collaborative” at James Madison University, when lobbying in favor of a proposed Highland County, VA, “wind farm” also cites a statement by President Bush on February 21, 2006, that “If the technology is developed further...we could generate up to 20 percent of our electricity needs through wind...”⁵

What did President Bush REALLY say?

The possibility of wind supplying 20% of US electricity requirements is so preposterous that the claims seemed to deserve further checking to see if President Bush *really* made such a statement on February 21, 2006. The claim that wind could supply 20% of US electricity needs seemed particularly suspicious since the US Energy Information Administration (EIA) had, only a few

weeks before earlier, forecast that, by 2030, wind would supply only 1.09% of US electricity⁶ (a forecast that has recently been lowered to 0.89%).⁷

Fortunately, the White House staff keeps copious records of what Presidents say while carrying out their official duties and the unclassified records are publicly available. The White House web site has a complete 15-page transcript covering the President's remarks on February 21, 2006, while participating in an "Energy Conservation and Efficiency Panel" at the National Renewable Energy "Laboratory" (NREL) in Golden, CO.⁸

A review of the transcript shows that DOE and the others cited above are guilty of (a) lifting some of the President's words out of context, (b) claiming as a Presidential "announcement" or "statement" a quote from some unnamed, unreliable source, and (c) failing to acknowledge what they (DOE and others cited) must have known to be a totally unrealistic statement.

Specifically, the words that are lifted out of context are from the third to last paragraph of a long (2,650 word), at least partially extemporaneous monolog covering virtually all sources of energy that the President delivered to an assemblage of Colorado politicians and NREL employees. The paragraph *from which the words were lifted by DOE and others* actually reads as follows:

"And finally, wind. We don't have a lot of turbines in Washington, but there's a lot of wind there, I can assure you of that. (Laughter.) But there are parts of the country where there are turbines. They say to me that there's about six percent of the country that's perfectly suited for wind energy, and that if the technology is developed further, that it's possible we could generate up to 20 percent of our electricity needs through wind and turbine."⁹

The underscored words are the ones that DOE and others have lifted out of context.

It's unclear from the official record who the "they" are that the President is quoting but it's unlikely that it was anyone credible. Further, if the comments had been prepared in advance, White House speech writers and fact checkers almost certainly would have kept the President from engaging in such unrealistic rhetoric and pandering to his NREL audience.

Quite likely, the White House research staff would have checked with EIA and learned that wind provided 36/100 of 1% of US electricity production in 2004 and, as indicated earlier, that EIA was then forecasting that wind would account for 1.09% of US electricity by 2030.¹⁰

Apparently, neither DOE nor other wind industry advocates cited above have "fact checkers" or they probably would not permit such gross distortions of the President's comments. Repeating the false claim makes it appear that DOE officials are less concerned about making President Bush "look a fool" by attributing an outrageous claim to him than they are about pleasing the wind industry.

Background on President Bush's Interest in "Wind Energy."

While President Bush isn't guilty of making an outrageous "statement" that 20% of US electricity could come from wind, public records show that there have been times in the past when he was unduly enthusiastic about wind energy.

For example, New York Times writer, Thomas L. Friedman, in a December 15, 2006, article¹¹ reports extensively on an interview with former FERC and Texas PUC Chairman, Pat Wood. Mr. Wood had left FERC and become an adviser to UK-US “wind farm” developer Airtricity, Inc. The interview apparently took place while Mr. Friedman and Mr. Wood were touring a Texas “wind farm.” According to the article, in mid-1996, then Governor George W. Bush instructed then PUC member Wood to “Go get smart on wind” and “...to work on wind with the utilities and the environmentalists.” Friedman reports that this effort led to the “Texas Renewable Portfolio Mandate, which Mr. Bush got passed by the Texas Legislature in 1999.”

Public records¹² also show that that Enron Chairman and CEO, Ken Lay, lobbied then Governor Bush to support federal tax breaks for wind energy. Specifically, on August 10, 1998, Mr. Lay, wrote to Governor Bush urging him to write to US House Ways and Means Committee Chairman Bill Archer in support of a bill that would extend for 5 years the “wind production tax credit (PTC), which was passed by the [President George H.W.] Bush Administration in the Energy Policy Act of 1992.” Whether the Governor complied with the request is unclear but the highly lucrative PTC has repeatedly been extended. It is a huge benefit for “wind farm” owners but the tax burden that the owners escape is, in effect, shifted to ordinary taxpayers who are not as well represented in Washington as the wind industry).

Huge wind turbines produce little electricity

Since 1996, a lot of wind energy generating capacity has been built in Texas. In fact, the American Wind Energy Association (AWEA) reports that wind turbine capacity in Texas at the end of 2006 totaled 2,631 megawatts.¹³ If all this capacity were to operate at a 30% capacity factor,¹⁴ Texas “wind farms,” now scattered over thousands of acres of land, would produce 6,914,268,000 kWh of electricity in a year. That sounds like a lot of electricity but:

- It is equal to 1.75 % of the 394,360,000,000 kWh of electricity produced in Texas during 2005.¹⁵
- It is equal to about one third of the electricity produced during 2005 by *each* of the following reliable, dispatchable Texas electric generating stations:
 - South Texas project that produced 19,789,293,000 kWh.
 - W. A. Parish plant that produced 18,469,681,000 kWh.
 - Comanche Peak plant that produced 18,443,200,000 kWh.
- The intermittent, unreliable electricity from “wind farms” has less real value than electricity from reliable generating plants because it is available only when the wind is blowing in the right speed range, which is most likely to be at night and in winter – not on hot weekday summer afternoons of July and August when electricity demand is highest.

A questionable legacy?

Undoubtedly, the growth of wind generating capacity in Texas was due largely to (a) the Texas Renewable Portfolio Mandate, (b) the generous federal wind Production Tax Credit favored by Mr. Lay, (c) the generous federal 5-year double declining balance accelerated depreciation deduction for wind generating equipment, and (d) Texas political leaders’ and regulators’ willingness to approve construction of substantial additional transmission capacity to move

electricity from “wind farms” to places where the electricity is needed – but with the costs borne by electric customers, not by “wind farm” owners.

Undoubtedly, owners of the “wind farms” in Texas have prospered mightily from the extremely generous federal tax breaks and other measures listed above. However, Texas’ enthusiasm for wind energy has not been beneficial for everyone. For example:

- Electricity from “wind farms,” while having less value, is more expensive than electricity from traditional energy sources.
- Tax burden escaped by “wind farm” owners is shifted to ordinary taxpayers who do not have tax shelters.
- The cost of building new electric transmission capacity to move electricity from “wind farms” to areas where the electricity is used -- as well as the higher cost of wind-generated electricity -- is passed on to electric customers in their monthly bills..
- Electric industry and ERCOT ISO officials have reported their concern about the amount of wind turbine generating capacity that could be counted on during times of peak electricity demand. Apparently they have considered recommending a capacity value of only 2%.¹⁶
- In recent months, some in Texas have become so concerned about the adverse impacts of “wind farms” that they have begun taking their concerns and opposition to the Texas courts.

When the President George W. Bush Library is eventually opened, it’s unlikely that the insidious Texas “Renewable Portfolio Mandate” or “wind energy” will be prominent exhibits.

Evidence continues to grow that “wind farms” are being built primarily for their tax benefits for wind farm owners, not because of their environmental or energy benefits.

Unreliability of electricity from wind

Concerns about the intermittence and unreliability of electricity from wind – such as those expressed in the ERCOT ISO report cited above -- from wind are growing.

Interestingly, Mr. Friedman’s December 15, 2006, *New York Times* article cited above expressing enthusiasm for wind energy was followed on December 28, 2006, by a *New York Times* article by Mr. Matthew L. Wald that provided a much more sober and objective picture. The article, entitled, “Wind energy turns out to have a complication: reliability” identified one of wind energy’s major “Achilles heels”; i.e., wind energy is an unreliable source that cannot be relied on at times of peak electricity demand. Specifically, Mr. Wald states:

“But for all its promise, wind also generates a big problem: Because it is unpredictable and often fails to blow when electricity is most needed, wind is not reliable enough to assure supplies for an electricity grid that must be prepared to deliver power to everybody who wants it — even when it is in greatest demand.

“In Texas, as in many other parts of the country, power companies are scrambling to build generating stations to meet growing peak demands, generally driven by air-conditioning for new homes and businesses. But power plants that run on coal or gas must "be built along with every megawatt of wind capacity," said William Bojorquez, director of system planning at the Electric Reliability Council of Texas, a power grid that covers most of the state.

“The reason is that in Texas, and most of the United States, the hottest days are the least windy.

“As a result, wind turns out to be a good way to save fuel, but not a good way to avoid building plants that burn coal. A wind machine is a bit like a bicycle that a commuter keeps in the garage for sunny days. It saves gasoline, but the commuter has to own a car anyway.”¹⁷

A politically correct “throwaway line”?

While officials in the US DOE spend millions of tax dollars each year to help the wind industry and pay for lobbying on behalf of wind industry projects, President Bush’s statements about wind energy seem to have become more measured. Perhaps White House and Executive Office of the President staff have cautioned him not to believe the claims from DOE and other wind advocates and to recognize the truly tiny role that wind energy will be able to play in supplying US energy requirements – and even that at great cost to taxpayers and electric customers.

However, “Increase our use of wind and solar energy” or something very similar seems to remain as a sort of “throwaway line” in the President’s speeches and messages. Similar lines are often uttered by governors, members of Congress and state legislatures, and regulators who are faced with pressure from constituents to “do something” about high energy costs and the fear of energy supply shortages. In these situations, relying on popular wisdom and referring to “wind and solar energy” may be the best they have to offer.

However, as demonstrated clearly by EIA’s Annual Energy Outlook 2007, neither source offers any possibility of supplying a significant share of US energy requirements – even when looking as far into the future as 2030. Specifically, EIA projects that, by 2030:

- Wind will supply 4/10 of 1% of US energy consumption and 89/100 of 1% of US electric generation.
- Solar energy will supply 9/100 of 1% of US energy consumption and 12/100 of 1% of US electric generation.

Apparently those who make use of such statements have either (a) not caught up with the facts about wind energy benefits and costs that have been uncovered during the past 3 years or (b) they are aware of these facts but are assuming that their listeners are unable to distinguish between fact and political rhetoric.

Glenn R. Schleede
18220 Turnberry Drive
Round Hill, VA 20141-2574

Endnotes:

¹ DOE-EERE, “Wind Power Today,” May 2006 <http://www.nrel.gov/docs/fy06osti/39479.pdf>

² Secretary Bodman’s prepared text can be found at <http://www.doe.gov/news/4353.htm>

³ http://www.airtricity.com/ireland/media_center/press_releases/usa/Pat%20Wood%20announcement.doc. April 4, 2006

⁴ Wald, Matthew L, “Wind energy turns out to have a complication: reliability,” December 28, 2006, <http://www.iht.com/articles/2006/12/28/business/wind.php> The story also appeared in the New York Times.

⁵ Miles, Jonathan J., Letter to Mr. Joel H. Peck, Clerk, Virginia State Corporation Commission, July 13, 2006, p. 10.

⁶ US EIA, *AEO2006*, Tables A8 and A16.

⁷ US EIA, *AEO2007*, Tables A8 and A16.

⁸ <http://www.whitehouse.gov/news/releases/2006/02/20060221.html> (Page 5)

⁹ Ibid.

¹⁰ US EIA, *AEO2006*, Tables A8 and A16.

¹¹ Friedman, Thomas L., "Whichever Way the Wind Blows," New York Times, December 15, 2006.

¹² Page 1 of Ken Lay letter to Gov. G.W. Bush: <http://www.thesmokinggun.com/archive/bushlayb11.html>; Page 2 of Ken Lay letter to Gov. G.W. Bush: <http://www.thesmokinggun.com/archive/bushlayb12.html>

¹³ <http://www.awea.org/projects/>

¹⁴ According to EIA Form 902 data, the actual average capacity factor in 2005 for "wind farms" in Texas was 28.8%

¹⁵ US EIA, Electric Power Monthly, March 2006, Table 1.6.B.

<http://tonto.eia.doe.gov/ftproot/electricity/epm/02260603.pdf>

¹⁶ Electric Reliability Council of Texas Independent System Operator (ERCOT ISO) and electric industry Informal White Paper for the Texas Legislature, 2005, "Transmission Issues Associated with Renewable Energy in Texas," March 28, 2005. <http://www.ercot.com/news/presentations/2006/RenewablesTransmissi.pdf>

¹⁷ See footnote 4, above.