

Industrial Wind Development in North Carolina

What is going on in NC appears to be indicative of what is happening in many other places, so this case study has widespread applicability.

This is what I have been able to uncover on my own, by talking to officials in the Elizabeth City community, communicating with about two dozen key state agency people, plus reviewing the documents posted on such sites as the NC Utilities Commission (<<<http://tinyurl.com/3zk9w96>>>), etc.

This whole matter is precipitated because NC is *mandating* extensively more wind energy through its *Renewable Energy Standard* (Senate Bill-3) (<<<http://www.ncuc.commerce.state.nc.us/reps/reps.htm>>>). This in itself is an **extraordinary** matter that has escaped critical journalistic scrutiny.

If renewable energies are so beneficial *and* cost competitive (which are the claims of their lobbyists), WHY would the state FORCE their utilities (and citizens) to use these? This action came about due to the exceptional influence of lobbyists, and any benefit to North Carolina taxpayers, ratepayers or the environment is inadvertent.

Once the state has taken the extreme measure of mandating commercial products on its citizens, one would assume that the state would:

- a) take commensurate steps to see that NC citizens receive genuine energy and environmental benefits from the mandate,
- b) do an objective comprehensive analysis to assure that the cost of such benefits was less than other alternatives,
- c) make sure that all pertinent state agencies were properly educated regarding the mandated renewable energies,
- d) see that some state agency was charged with the responsibility to provide NC communities with comprehensive, **objective** information, and
- e) make sure that there was a specific approval process setup for the mandated industrial energy projects, verifying (for instance) that NC citizens are not physically harmed in the process.

My investigation shows that nothing remotely like any of these has happened, or is even in the works.

Consider the following:

1 - Prior to enacting this renewable energy legislation, the state did no objective assessment to ascertain whether such a mandate would be cost-beneficial to NC citizens. This legislation was effectively written by renewable energy lobbyists, and was preceded by **no scientific assessment** of the **technical, economic**, and/or **environmental** aspects of industrial wind energy, to ascertain what benefits would be derived by NC citizens.

(The state did hire LaCapra Associates, renewable proponents, to generate a predictable endorsement.) *That such a significant mandate was based on scientifically unproven lobbyist claims is very telling about our political process.*

After enacting this lobbyist measure, our representatives knew that such energy projects would be proposed shortly. In light of that it would seem that they would have taken three specific steps to protect the interest of North Carolina citizens:

2 - The state should have taken adequate measures to assure that all appropriate NC agencies would be immediately properly educated regarding renewable energies. This would be to make sure that these agencies would do an appropriate job of approving, supervising, and monitoring such complex projects. Unfortunately, nothing of the kind was arranged by NC legislators. I asked some state agencies (e.g. the Public Staff) how they got educated about industrial wind. They said that they had a presentation and an onsite visit to a Pennsylvania wind project. Who put on the presentation? Iberdrola, the wind developer. Who setup the wind project visit? Again, Iberdrola. I asked whether they thought that with such an arrangement that they might be getting only one side of the story? They said "maybe." *This is typically what happens when lobbyist written policies are enacted.*

3 - The state legislators should have made sure that affected communities would have proper state assistance to adequately assess these complex matters. For example, when a NC community is approached about hosting such an industrial project, they should be able to go to some qualified NC agency which would provide them with: **a)** comprehensive, **b)** objective, and **c)** balanced information about the pros and cons of such developments.

Affected NC citizens could then get accurately educated about this complex matter, and then come to their own conclusions as to whether or not it is beneficial for them. Regretfully, the legislators have directed no state agency to provide such information, so NC communities are entirely on their own in this highly technical matter. To make it much worse, these communities are dealing with very experienced and extremely aggressive developers, on an issue that will impact their community for at least twenty years.

4 - The state legislators should have made sure that their mandate was accompanied by an appropriate statewide renewable energy approval process. In fact, subsequent to this legislation passing, a study was done in 2009 by the *Environmental Management Commission*, which proposed such an approval process for wind developments (<<<http://tinyurl.com/443f9dy>>>). Due to political disagreements among the legislators, this was not approved, and nothing else has been legislated since.

Although the EMC proposal had some serious deficiencies, clearly *some* statewide industrial wind energy approval process is needed, so a compromise should have been worked out. The current situation, though, is that there are **zero NC industrial wind energy rules and regulations** to ascertain that these developments do not have adverse effects on things like human health and safety.

That our legislators would be so remiss in every one of these critical areas, is disturbing. Let's look closer at just one of them, the current "approval" process, to get a better idea as to how inadequate it really is —

5 - Contrast the lack of NC wind energy rules and regulation to the fact that there are easily a *hundred* studies, reports and articles (written by independent scientists and experts) on just industrial wind turbine adverse affects on human health and safety. Almost all of these are in the public domain. See this *brief* summary <<<http://www.masterresource.org/2011/07/wind-energy-health-safety/>>>.

6 - The Public Staff affiliated with the NC Utilities Commission is charged to represent the interests of NC businesses and citizens in energy related matters (<<http://www.pubstaff.commerce.state.nc.us/index_files/Page380.htm>>). As such they are a key gatekeeper in this already crippled approval process. Despite their responsibility to speak objectively for NC citizens, the Public Staff had **zero** to say about any possible **technical, economic or environmental** downsides of industrial wind development when it came to reviewing the first major NC wind project (e.g. <<http://tinyurl.com/ct8kbyf>>).

When I spoke to them they justified this significant omission by saying that they "were not aware of any problems." This is despite the fact that there well over a *thousand* studies, reports and articles about wind energy's deficiencies in these areas, many written by independent energy experts, again in the public domain. Subsequently they acknowledged they they considered it their job responsibility to enable the wishes of the state legislators. What about the situation when (like with SB-3) the legislators wishes were not in the interest of citizens and businesses? Their Iberdrola comments answer that question.

7 - The NC Utilities Commission (<<<http://tinyurl.com/76arthx>>>) is charged with seeing that state electrical power sources are "economical and reliable". As such they also are an extremely important checkpoint in the approval process, However, despite their obligation concerning "economical and reliable," in their "approval" of the Desert Wind electric power project **not a single word or finding of fact dealt with it being "economical or reliable"** (<<<http://tinyurl.com/5trxz4u>>>). *How can that be right?*

8 - What do we know about wind energy's economics and reliability? Plenty. For instance, compared to our conventional sources of electricity, wind energy is extremely unreliable. One technical assessment of this (that the NC Utilities Commission should be well aware of) is what is called Capacity Value. The Capacity Value of Nuclear, Hydroelectric, etc is well over 90%. The Capacity Value of onshore wind energy is less than 10%. **This is a profound difference — yet was not even mentioned in testimony or the Commission's report!**

It should go without saying that a proper assessment of wind energy's Capacity Value should be done by an independent source, and be based on transparent, empirical data. A good commentary on this (and other relevant factors) was an assessment of NYS's energy plan by independent expert Glen Schleede (<<<http://tinyurl.com/85bl6dx>>>).

9 - As just one more relevant reliability/economic point: the US Department of Energy (in collaboration with a wind lobbyist company!) says "Areas with annual average wind speeds around 6.5 m/s and greater at 80-m height are generally considered to have suitable wind resource for wind development." They then provide an 80-m height map for **all** of North Carolina (<<<http://tinyurl.com/89dbfsc>>>). This map showed that the average wind speeds for the proposed Desert Wind project is 4.5 m/s - 5.0 m/s — **significantly** below the federal government's "suitable wind resource". For some reason this was not brought up by the Public Staff or anyone else before the Commission, and the Commission itself failed to mention this detail.

[As a point of reference, this same government report shows the available suitable wind acreage for North Carolina as amounting to only .13% of the total state acreage — one of the lowest percentages in the US. Compare this to Texas (55.5%), Kansas (89.4%), Nebraska (91.6%), etc. This is yet another independent fact that brings into question the merits of the RES.]

10-When approached by multi-national developer Iberdrola to host their development, the NC counties (naturally) knew essentially nothing about any of the technical issues involved with industrial wind energy. I was told that some county commissioners DID reach out to NC agencies to get a more balanced understanding of this complex matter. They found that there was **no NC agency** that was able to provide the community or its representatives with *comprehensive, balanced* information about these very technical matters. This meant that the communities were effectively on their own in dealing with an extremely aggressive and experienced developer, on a technically complex matter that they had almost no knowledge about. *Does this sound like the interests of NC citizens will be properly represented?*

11-To make matters worse, instead of providing objective balanced information, the state agencies that did respond to the county solicitations for help, *acted as agents of the developer*. Their actions were about *facilitating* the development, rather than assisting the communities to objectively assess the merits of this 20+ year commitment. In effect the counties were negotiating with two opponents: the developer and their own state agencies. *Who do our state agencies have primary allegiance to: entrepreneurs or citizens?*

12-A good example of this bias is the NC Department of Commerce. Their website (<<<http://www.nccommerce.com/about-our-department>>>) proudly states that "The department's mission is to improve the economic well-being and *quality of life* for all North Carolinians". To "assist" the Elizabeth City area communities they wrote "Economic Impact Analysis - Wind Energy" (<<<http://tinyurl.com/3v9caxx>>>). The problem is that (despite the misleading title) that this was absolutely NOT an "Economic Analysis" as would be understood by most people. Instead it was a promotion piece that only told one side of the story. *How can a community make an informed decision when state agencies are so biased?*

13-Are there economic downsides? Indeed there are. Again, there are numerous studies, reports and articles in the public domain that elaborate on such liabilities. Here is just one example: agricultural loss due to several factors. For instance, a study by four world-renown experts concluded that there can be significant agricultural losses due to bats being killed by wind turbines (<<<http://tinyurl.com/768ezml>>>). To help communities quantify this impact, they provided a calculation for every county in the US. Their conclusion was that the two counties involved with Desert Wind could have as much as a **\$24 Million dollar *annual* agricultural loss** due to bat deaths! Was anything remotely like this even alluded to in the NC Department of Commerce "Economic Impacts" report? No.

14-For the NC Department of Commerce to tell only one side of the story is bad enough, but even worse, it was almost exclusively based on information provided by the developer, and from what I can find — *none of which was verified*. How is a community able to properly assess the "Economic Impacts" of such a development when state agencies like this are simply promoting unsupported claims made by the developer?

15-The NC Department of Commerce could have come close to redeeming itself if it made the following strong recommendation in its report: "It is imperative that any host community get any and all claims made by the wind developer to be legally guaranteed." Nothing remotely like that appeared in the actual report... Even better would have been if the NC Department of Commerce used it's considerable leverage to arrange such guarantees directly with the developer. *Unfortunately, again this has not happened.*

16-At the public hearing before the NC Utilities Commission, the NC Department of Commerce had yet another chance to come clean. Regrettably they continued in their evangelism campaign by saying: “We did an economic study back in May of 2010 and I’ll just share some of those figures with you. The project is going to be about \$750 million. It will be the largest single initial investment by a company in northeast NC ever” (<<<http://tinyurl.com/4ymlzvg>>>: Page 7). For some reason they failed to pass on to the Commission two facts that their own report also said: **a)** “Nearly all of the \$750 million in upfront investment will be with firms located outside North Carolina,” and **b)** “The employment impacts for a project with this much initial investment is small.” *Exactly who is the Department of Commerce representing here?*

17-In case anyone wasn't aware of the incestuous relationship here, it should have become very clear when the developer later testified before the NC Utilities Commission (<<<http://tinyurl.com/6gdrysm>>> see p 42) about the purported economic impacts of his wind project to North Carolina. In an amazing display of chutzpah, to give their unproven claims the *appearance* of some validity, they cited the Department of Commerce report! Yes, that is the very report that was fabricated almost entirely from information provided by the same developer. *No one called him on this brazen example of circular reasoning.*

18-Back to the situation with the affected community, it should be quite apparent that the Elizabeth City counties are entirely on their own here — and in the deep end of the pool. They now had the obligation to write meaningful ordinances to protect their citizens (like zoning rules) — all while under significant pressure from the developer to play ball or “lose out.” Since there was no help coming from the state, the developer (who was well aware of the state's compliance) stepped into the vacuum. So, prior to the counties writing things like zoning rules, Iberdrola arranged for them to hear from some people on topics like acoustics. The counties then wrote their rules — based almost exclusively on the opinions of the developer's hired spokespeople. In other words **the developer effectively wrote the county rules that the developer has to comply with!** *This is in the interest of local citizens?*

19-In a similar vein, when it came time for the county legislators to vote on a *Conditional Use Permit* (a major milestone, which follows after the NC Utilities Commission “approval”), I was told that the developer approached the counties and essentially said: “You don't have the expertise to properly write this document, so we have written it for you. Here, this is what you need to approve” and handed them a pre-written *Conditional Use Permit* document to vote on. Despite the fact that that this developer-written document made some unsupported self-serving assertions (including some that appear to be fraudulent), the counties went ahead and approved it. *This again is where the counties needed objective help from the state, but none was forthcoming.*

20-Finally, the state has setup zero followup *after* such a project is up and running, to ascertain that there is *any* public benefit from such a development. This is despite the fact that the **only** reasons such a project exists are that state law mandates it, state subsidies support it, and then state agencies facilitated it. If this is such a great asset that it needs to be legislated, it would seem obvious that the state would require significant data from the developer to prove that real benefits came from this legislation. *But no, no such data has been required or asked for.*

At its core this is an epic struggle between politics and science. So far, the lobbyists are pitching a shutout.

An obvious response would be: with such widespread corruption and incompetence, why hasn't this become a major investigation of some of the state's media? Almost none of the above problems have been written about in *any* NC newspaper, much less the composite situation. Newspapers (who are looking for ways to distinguish themselves from the Internet, etc.) should find such an investigation to be right up their alley.

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