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spotlight

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Wind Power and the Ridge Law

N.C. Legislature Should Stop Providing Special Treatment for Wind Power

KEY FACTS: **• Wind power advocates are pushing for commercial wind turbines along the mountain ridgelines—the mountains and the coast are the only locations where wind is viable in North Carolina. These commercial wind turbines can be as tall as 500 feet or the height of 50-story skyscrapers.**

• The Ridge Law generally prohibits most tall buildings over 40 feet from being built along the ridgelines.

• According to N.C. Attorney General Roy Cooper and any reasonable interpretation of the Ridge Law, commercial wind turbines would be prohibited along the ridges and the law would only allow small traditional windmills that have long been in use in rural communities.

• In the 2009 legislative session, the Senate helped promote wind power by creating a special exception in the Ridge Law expressly to allow personal residential wind turbines that can be slightly taller than 100 feet.

• This major exception is not good enough for wind power proponents. They want massive commercial wind turbines and have tried to spin the Senate's actions as blocking wind power.

• If the legislature had not already taken action in 2007 to provide special treatment for wind power, commercial wind turbines in the mountains would not even be a possibility due to the high cost and unreliable nature of wind power.

• The 2007 law, SB 3, requires utilities to generate 7.5 percent of their electricity from renewable sources, such as wind. For all practical purposes, the legislature is dictating that commercial wind turbines be built along the ridgelines.

Recommendations:

1) Repeal the renewable energy mandate in SB 3. By removing this provision, there no longer will be a subsidy to wind power developers that guarantees an artificial demand for this costly and unreliable source of electricity. It also would remove the pressure to build commercial wind turbines along the ridgelines.

2) Repeal the Ridge Law. A statewide blanket prohibition on development along the ridges violates the rights of individuals to use their property. This prohibition also improperly allows the state to grant special exceptions for special interests and "politically correct" development.

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environmental groups and some legislators are trying to get large commercial wind turbines along the North Carolina ridgelines. These turbines can be as tall as 500 feet, or the height of 50-story skyscrapers. They face an obstacle, however.

In 1983, the state passed the Mountain Ridge Protection Act[1] (Ridge Law) to prohibit the construction along mountain ridgelines of tall buildings and structures that exceed 40 feet. While exceptions do exist in the law, these commercial wind turbines would be prohibited. This law has not deterred wind power advocates from pushing for commercial wind turbines. They are actively seeking a legislative exception for these massive wind turbines.[2]

This *Spotlight* provides background on the Ridge Law and the attempts to create special exceptions for wind turbines. The report argues that in order to eliminate the need for special exceptions and to respect property rights, the Ridge Law should be repealed. In addition, this report also argues that the government should repeal the state's renewable energy mandate that is the driving force behind the construction of commercial wind turbines along the ridgelines.

The Ridge Law

The Relevant Exception

In 1983, a ten-story (about 100 feet) condominium on Sugar Mountain opened.[3] The condominium, called Sugar Top, generated so much controversy because of its alleged harmful appearance along the ridgeline that the legislature decided to pass the Ridge Law.

The law generally prohibits the construction of "tall buildings or structures" of more than 40 feet on protected mountain ridgelines. However, according to the statute, "tall buildings or structures do not include":

> Structures of a relatively slender nature and minor vertical projections of a parent building, including chimneys, flagpoles, flues, spires, steeples, belfries, cupolas, antennas, poles, wires, or windmills.[4]

Wind power proponents jump on the "windmills" language, as if that alone determines whether 500-foot wind turbines are allowed. The entire language has to be read to determine whether the legislature in 1983 really meant for commercial wind turbines to be exempted when it included "windmills" or whether it meant something else, such as small rural windmills traditionally seen on farms.

As a matter of sound statutory interpretation, a word in a list generally should be given related meaning to the other words in the list.[5] The various examples of slender structures and minor vertical projections of parent buildings inform us as to what the legislature intended when it exempted "windmills."

All of the structures listed are "incidental" to the main structure and are inconspicuous. It is impossible to equate a flagpole, as listed in the law with, for example, a 500-foot commercial wind turbine with a rotor blade diameter greater than a football field,[6] or a 100-foot residential wind turbine with a rotor blade diameter greater than 20 feet.[7]

The Intent of the Law

The intent of the law also provides guidance as well. The statute states in its legislative findings section:

> Tall or major buildings and structures located on ridges are a hazard to air navigation and persons on the ground and detract from the natural beauty of the mountains.[8]

The law exists in response to Sugar Top and is an attempt to protect the aesthetics of the mountains. The goal of aesthetics is not consistent with an exception for these tall wind turbines.

Table 1: Comparing How the Ridge Law Currently Treats Windmills to How Other Proposed Changes Would Treat Windmills Along the Ridgelines

Law and Proposals	*Types of Windmills Allowed*
Existing Ridge Law	Allows traditional rural windmills only, such as windmills that pump water (based on the AGs opinion and reasonable interpretation of the law)
SB 1068	Expressly allows electricity-generating wind turbines slightly over 100 feet that are used primarily for personal residential purposes (through a likely drafting error, the bill would no longer allow traditional rural windmills that do not generate electricity)
What Wind Power Proponents Want	Commercial wind turbines (these turbines can exceed 500 feet or the height of 50-story skyscrapers)

In 1983, it is hard to imagine that the legislature would simply list "windmills" and presume that everyone would realize that it meant tall electricity-generating wind turbines, as opposed to just traditional rural windmills, when turbines were not prevalent along the ridgelines or anywhere in the state. The legislature would have made it expressly clear they wanted to include these turbines.

Further, another exception in the Ridge Law expressly allows for water towers, phone towers and other utility and communication-related structures.[9] If the legislature wanted to include turbines, which are comparable to these towers, it would have listed wind turbines in this exception.[10]

The Attorney General's Opinion

In a 2002 letter to the Tennessee Valley Authority regarding a proposed wind power plant, Attorney General Roy Cooper came up with a similar interpretation of the Ridge Law:

> The Legislature in 1983 had in mind, the traditional, solitary farm windmill which has long been in use in rural communities, not windfarm turbines of the size, type or certainly number proposed here, especially when "*all the turbines would probably be seen together from most viewing locations.*"[11] (Emphasis in original.)

The Attorney General stressed that "windmills" referred to "traditional" windmills that have been used a long time in rural communities. In other words, the types of windmills the legislature contemplated were windmills that had nothing to do with the production of electricity, but instead were the traditional windmills, such as those that pump water.

Senate Passed SB 1068

In the 2009 legislative session, the North Carolina Senate passed a bill[12] (SB 1068) that would amend the Ridge Law. The House may take action on this bill next year. The bill tries to provide a clear definition of what is and what is not allowed on the ridges when it comes to wind turbines.

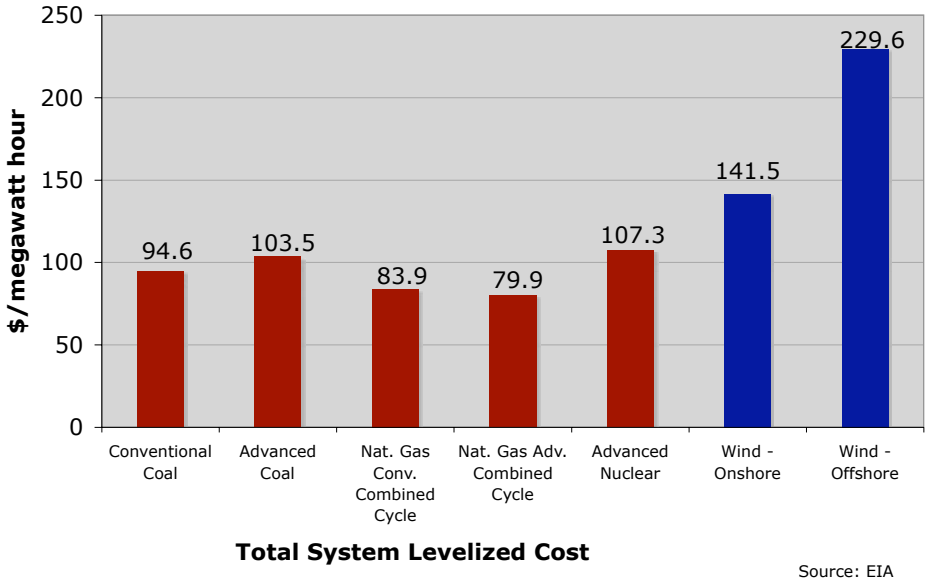
Unfortunately, the language weakens the Attorney General's interpretation of the Ridge Law that only traditional small rural windmills are allowed on the ridges (underlined language is new language):

> Structures of a relatively slender nature and minor vertical projections of a parent building, including chimneys, flagpoles, flues, spires, steeples, belfries, cupolas, antennas, poles, wires, or ~~windmills.~~windmills, if the windmill is associated with a residence, the primary purpose of the windmill is to generate electricity for use within the residence, and the windmill is no more than 100 feet from the base to the turbine hub.[13]

The language would allow wind turbines greater than 100 feet when counting the length of the blades. It primarily limits windmill use for personal residential use only. Ironically, likely by mistake, the language would no longer allow the traditional rural windmill that does not produce electricity because the exception for windmills only allows electricity-producing windmills.

Even though the Senate took action to help promote wind power, there have been efforts to spin the bill as an attempt to ban wind power and specifically commercial wind turbines. A *Winston-Salem Journal* article[14] reporting on the passage of the bill was entitled "Senate bans some wind energy." A recent *New York Times* article was entitled "North Carolina Moves to Limit Wind Projects."[15]

Figure 1. Cost of New Generating Technologies, 2016, Revised AEO 2009 Reference Case



Source: EIA

Source: "Levelized Cost of New Electricity Generating Technologies," Institute for Energy Research, May 12, 2009, using data from the Energy Information Administration's **Annual Energy Outlook 2009** (revised), *http://www.instituteforenergyresearch.org/2009/05/12/levelized-cost-of-new-generating-technologies.*

Note: The above estimated costs for wind power are likely to be much lower than actual costs. These costs do not take into consideration the back-up sources that would be needed for wind power. For wind power in the mountains, there would be additional costs such as the construction of roads to gain access to the ridgelines.

That *New York Times* article made it sound as if the Senate was unfairly picking on commercial wind power by banning it along ridgelines. It never mentions that a ban on development already exists along the ridgelines for almost all structures, including virtually all windmills. It also never explains that the Senate was actually creating a special exception for tall residential wind turbines.

This exception may not be as extreme as wind power proponents would like, but that does not mean the Senate banned wind power.[16] In fact, the Senate is giving special treatment to wind power (see Table 1 for how current law and proposed changes would treat windmills along the ridgelines).

Government Should Not Dictate What is Built Along the Ridgelines

The current controversy over wind power along the ridgelines is the result of special interest legislation[17] (SB 3) that passed in 2007. This legislation requires utilities to generate 7.5 percent of their electricity from new renewable energy resources by 2021.[18] One of the potential renewable resources is wind power that would consist of large commercial wind turbines.

North Carolina utilities are forced to buy renewable energy, such as costly and unreliable wind power, because they would not otherwise do so. These higher costs are passed on to consumers (see Figure 1 for cost data). Wind power has higher costs than other new generation options despite its massive subsidies (see Figure 2 for federal subsidy data).

The only viable locations for wind power in North Carolina are along the coast and in the mountains. There is intense pressure, because of the renewable energy mandate and North Carolina's limited renewable energy potential,

to have commercial wind turbines along the ridgelines. Since the Ridge Law prohibits large commercial wind turbines, wind power proponents are seeking to modify the Ridge Law.

Recommendations

1) Repeal the renewable energy mandate in SB 3.

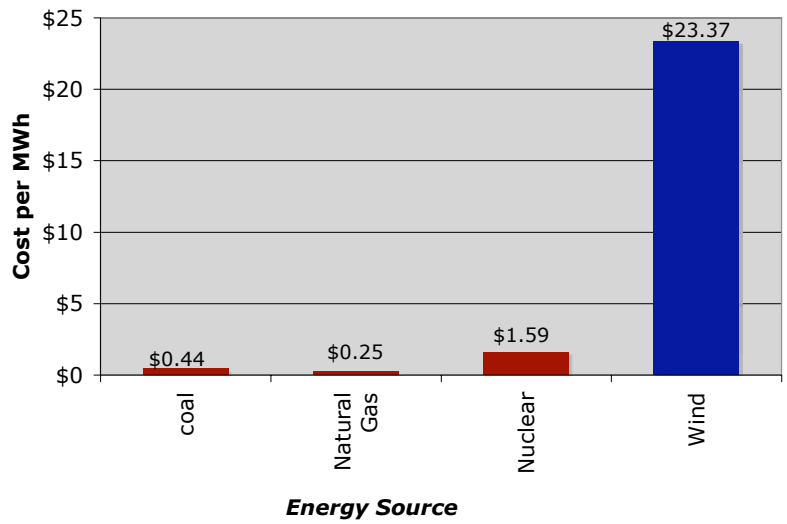
By removing this provision, there no longer will be a subsidy to wind power developers that guarantees an artificial demand for this costly and unreliable source of electricity. It also would remove the pressure to build commercial wind turbines along the ridgelines.

2) Repeal the Ridge Law.

A statewide blanket prohibition on development along the ridges violates the rights of individuals to enjoy their property. It also prevents development that could be beneficial to the community. This prohibition allows the state to grant special exceptions for special interests and "politically correct" development, as it has with wind power.

Property owners should be able to build what they want on their properties. If someone wanted to build a line of 500-foot turbines on the ridges, they generally should be allowed to. A property owner has a right to build what he wants on his property; he does not, however, have the right to force the public, through mandates on utilities, to pay for what he wants to build—that, however, is exactly what SB 3 does.

Figure 2. Cost of Federal Subsidies by Source



Source: "Federal Financial Interventions and Subsidies in Energy Markets 2007," Energy Information Administration, at p. xvi of the Executive Summary (Table ES5), April 2008, *http://www.eia.doe.gov/oiaf/servicerpt/subsidy2/index.html.*

If the Ridge Law were repealed, it would not lead to the construction of commercial wind turbines along the ridgelines. These turbines would not be built if North Carolina customers were not forced to pay for their construction. That is unlike low-cost and reliable energy sources like coal, nuclear, natural gas, and even a renewable source like hydropower—they would be developed regardless of any mandate.

Conclusion

The North Carolina legislature should repeal SB 3 so that the state is not, for all practical purposes, dictating that commercial wind turbines be built along the ridgelines. If wind power were ever to become a viable energy source, then utilities would purchase wind power. In the meantime, this mandate will lead to higher energy prices and be the impetus for massive commercial wind turbines along the ridgelines.

Finally, if the House considers SB 1068 next year, it should respect the proper interpretation of the Ridge Law and remove the special exception the Senate created for tall wind turbines—as a matter of good government, the legislature should not be in the business of granting special exceptions for preferred development.

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End Notes

1. N.C. Gen. Stat. § 113-205 *et seq., http://www.ncga.state.nc.us/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_113A/Article_14.html.*
2. See, *e.g.,* Scott Gollwitzer, "State needs a comprehensive wind energy policy," *Asheville Citizens-Times,* July 29, 2009, *http://www.citizen-times.com/apps/pbcs.dll/article?AID=200990728040Articles,* and and also see this withdrawn amendment that was going to be introduced by Senator Goss during the floor discussions on SB 1068: *http://www.ncga.state.nc.us/Sessions/2009/BillDocuments/Senate/PDF/S1068v3-A1.pdf.*
3. Sugar Top web page about the condo, *http://www.sugartop.com/about.htm.*
4. N.C. Gen. Stat. § 113A-206(3)(b), *http://www.ncga.state.nc.us/EnactedLegislation/Statutes/HTML/BySection/Chapter_113A/GS_113A-206.html.*
5. This doctrine is referred to as "noscitur a sociis." A definition can be found on many web sites, including on the Lawyers.com web site, *http://research.lawyers.com/glossary/noscitur-a-sociis.html.*
6. See, *e.g.,* "2.5 MW Wind Turbine," General Electric brochure, GE Energy, *http://www.gepower.com/prod_serv/products/wind_turbines/en/downloads/ge_25mw_brochure.pdf*, and see this web page that is part of a web site entitled "Wind Energy: The Facts," which is "coordinated" by the European Wind Energy AssociationL *http://www.wind-energy-the-facts.org/en/part-i-technology/chapter-3-wind-turbine-technology/evolution-of-commercial-wind-turbine-technology/large-commercial-wind-turbines.html*.
7. See, *e.g.,* this American Wind Energy Association web page on small wind: *http://www.awea.org/smallwind/toolbox2/factsheet_visual_impact.html*.
8. N.C. Gen. Stat. §113A-207, *http://www.ncga.state.nc.us/EnactedLegislation/Statutes/HTML/BySection/Chapter_113A/GS_113A-207.html.*
9. N.C. Gen. Stat. § 113A-206(3)(a), *http://www.ncga.state.nc.us/EnactedLegislation/Statutes/HTML/BySection/Chapter_113A/GS_113A-206.html.*
10. The exception listing water towers also exempts "equipment for the transmission of electricity." This exception does not apply to wind turbines because turbines are a source of electricity generation, not a means of transmission. There are clear and distinct differences between these two concepts. There is little to no disagreement on this point. The Attorney General's opinion on the Ridge Law also makes this point.
11. Letter to the Tennessee Valley Authority from North Carolina Attorney General Roy Cooper Regarding "Environmental Assessment for the 20-MW Windfarm and Associated Energy Storage System Facility," February 4, 2002.
12. North Carolina Senate Bill 1068 (2009), *http://www.ncga.state.nc.us/gascripts/BillLookUp/BillLookUp.pl?Session=2009&BillID=S1068.*
13. *Ibid.*
14. James Romoser, "Senate bans some wind energy," *Winston-Salem Journal,* August 7, 2009, *http://www2.journalnow.com/content/2009/aug/07/senate-bans-some-wind-energy/news-ncpolitics.*
15. Kate Galbraith, "North Carolina moves to limit wind projects," *The New York Times,* August 7, 2009, *http://greeninc.blogs.nytimes.com/2009/08/07/north-carolina-moves-to-limit-wind-projects.*
16. These articles are not referring to the mistake made to accidentally ban non-electricity generating windmills. The articles are referring to the continued prohibition on commercial wind turbines.
17. North Carolina Senate Bill 3 (2007), *www.ncga.state.nc.us/gascripts/BillLookUp/BillLookUp.pl?Session=2007&BillID=sb3.*
18. *Ibid.*