

Some Comments on the latest Tyrrell County (NC) [Wind Ordinance](#) (dated 4/18/17)

1 - A critically important understanding is that any proposed Tyrrell wind project will almost certainly have a **NET negative economic impact** on the community. To date, only the possible financial *benefits* have been discussed by wind energy marketers and their surrogates. Neither they (nor any NC state agency), is examining (either before hand, or after-the-fact) the other side of the coin: the **local financial liabilities** that independent experts have identified.

This [document](#) lists ten (10) different potential **local economic downsides** from a community hosting an industrial wind project. Using the studies from independent experts (not wind sales people), the estimate for Tyrrell County is that there will be an **annual Net Loss of \$3± Million**. See some specifics [here](#).

2 - Irrespective of the local economics, Tyrrell County has a statutory obligation to protect the health, safety and welfare of its constituents. The question is: *how is this properly done when dealing with industrial wind energy?*

Please reference the Town of Bethany (NY) [excellent study](#) about industrial wind energy issues. Their extensive study enumerated forty (40!) areas where they concluded that local wind energy regulation is warranted. In our view that is too many to expect a county to be able to understand or properly legislate.

From first-hand dealing with over a hundred US communities, it has been determined that five (5) properly written regulations will provide satisfactory health, safety and welfare protection to Tyrrell residents. To see how these are enacted in NC, please look at the [wind ordinance](#) passed by Carteret County, back in 2014. Craven County passed a similar good [wind ordinance](#) in 2018.

3 - The five important regulations that an appropriate wind ordinance should have are:

- a) A [Property Value Guarantee](#) (PVG), for homes within 2 miles,
- b) [Adequate setbacks](#) (1 mile from residentially-zoned property lines),
- c) [Sufficient noise limits](#) (35 dBA, 24/7, from residentially-zoned property lines),
- d) [Proper environmental tests](#) (paid for by the wind developer), *and*
- e) [Good decommissioning terms and conditions](#).

4 - Briefly, here's how the 2017 Tyrrell wind ordinance does on these five key items:

- a) **A PVG – none.** *This omission is a major deficiency, as it undermines the property rights of nearby homeowners.*
- b) **Adequate setbacks – 900± feet for 600 ft turbines.** *This is inadequate as it seriously jeopardizes the health, safety and welfare of proximate residents.*
- c) **Sufficient noise limits – 55 dBA.** *This is 4x louder than recommended. Scientific studies have concluded that the infrasound from this level will cause health problems.*
- d) **Proper environmental tests – None apparent.** *This is a serious omission. There are a variety of strongly advisable environmental studies that should be done before-hand.*
- e) **Decommissioning terms and conditions – nominal.** *For example, including a salvage cost in the calculation undermines the validity of this protection.*

Some positives in the current Tyrrell County wind ordinance:

Article 3, Section 2, item (13): It's good that the County requires funding for an independent engineering firm. However, industrial wind energy issues go considerably beyond just engineering. For example, who is going to assist the County in assessing the well-documented health impacts? or environmental impacts? or property devaluation impacts? or tourism impacts? or military impacts? Etc.

There is also a question here whether this is a one time fee, or an escrow account that must be maintained for the duration of the project. We would strongly recommend the latter, as the County will incur continual monitoring, etc. costs.

Article 3, Section 3, item (a): It's commendable that the County acknowledges a health concern with industrial wind turbines. However, how can it be proven *in advance* that the proposed wind turbines will "materially endanger the public health and safety" to Tyrrell citizens? And exactly what constitutes "materially"?

The reason for the setback and sound limits recommended, is that [studies](#) from *independent experts* have determined that such limits *will* protect the health and safety of local citizens. Rather than put the burden on citizens to document a future health situation, the commissioners should follow the recommendations of independent experts and include the two recommendations (3-b and 3-c, above).

An additional important note is that the words "... public health and safety..." should be changed to "... public health, safety and *welfare*..."

Article 3, Section 3, item (c): It's also commendable that the County acknowledged a residential property value concern with industrial wind turbines. However, how can it be proven *in advance* that the proposed wind turbines "will not substantially injure the value of abutting property"? And specifically what constitutes "substantially"?

The reason for the recommended Property Value Guarantee, is that [many studies](#) from *independent experts* have determined that residential property devaluation *will* likely happen within a two (2) mile range. Rather than forcing citizens to prove a future property value loss, the commissioners should follow the recommendations of independent experts and include a PVG (3-a, above). BTW, the PVG is written so that if there is no loss, then the costs to the wind developer will be trivial.

The bottom line is that this ordinance is a good starting point for Tyrrell County. It can (and should) be made **much** better by incorporating the recommendations above.

Let me know any questions about any part of this. There is no charge for me to provide you with independent science-based wind energy assistance.

john droz, jr.
Morehead City, NC
1/8/19