

Mill Pond = Mill Stone?



T O R C H
RENEWABLE ENERGY

Mill Pond Facility
Carteret County, NC



**Community Forums:
11/26/13 & 12/6/13**

*The materials here are the opinions of scientist John Droz, jr.
Do your own research and come to your own conclusions.*

**For More Information see:
["WiseEnergy.org/Carteret-Wind"](http://WiseEnergy.org/Carteret-Wind)**

Mill Pond: The Developer's Summary

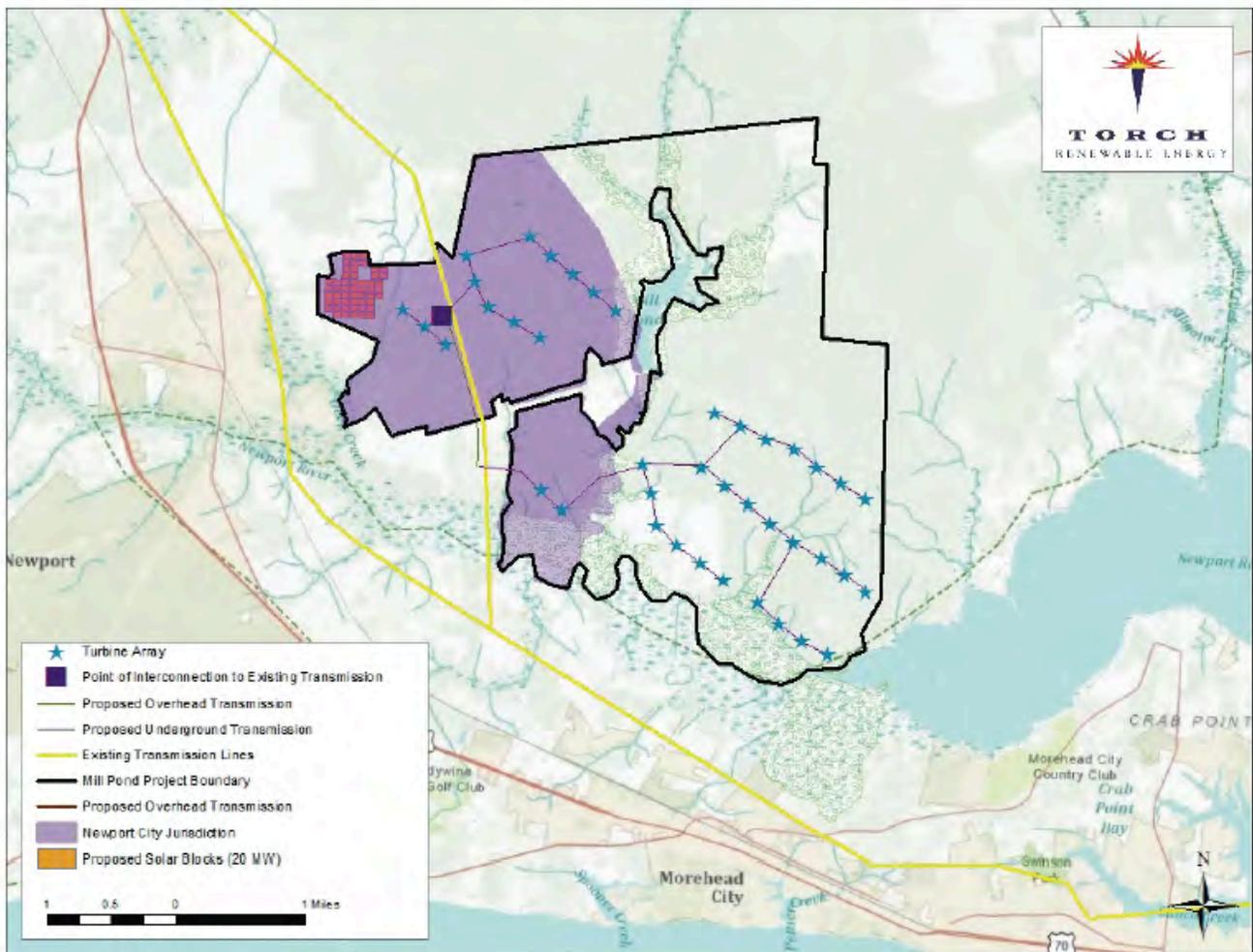
Key Project Highlights

Category	Data
Location	Onshore Carteret County, NC
Sponsor	Torch Renewable Energy, LLC
Site Area (Owner)	7,000 deeded acres (Weyerhaeuser) 150 deeded acres (Private)
Project Capacity	100 MW
<i>Wind Capacity</i>	<i>80 MW</i>
<i>Solar Capacity</i>	<i>20 MW</i>
Measured Wind Speed	6.37 m/s (80-meter hub height) 6.67 m/s (95-meter hub height)
Interconnection	230-kilovolt (kV) tap into existing Havelock-Morehead Wildwood 230 kV owned by Duke Energy Progress; SIS completed October 2013
Capital Investment	\$180MM-\$250MM

For the developer's full presentation package, see the link for that on "WiseEnergy.org/Carteret-Wind".

Mill Pond: The Developer's Map

City/County Jurisdiction Map



For the developer's full presentation package, see the link for that on "WiseEnergy.org/Carteret-Wind".

Food For Thought

What would you say if powerful fast-food industry lobbyists convinced the state and federal government into saying:

"We think that Windy's fast food is healthy, so to encourage more people to eat it we will:

- 1- Give W's a 30% cash rebate of the cost of any new store, &
- 2- Pay W's an extra 50¢ for every hamburger they sell, &
- 3- Allow W's to charge an inflated price for their food, &
- 4- Give W's preferential treatment over their competitors, &
- 5- Ignore most of W's environmental or health consequences, &
- 6- Mandate that all citizens buy 10% of their meals at W's."

What would you say if you also found out that they did all this ***without a scientific assessment proving their initial premise*** (i.e. that W's food was materially healthier than any other fast food business)?

Would such a food policy be acceptable to you?

Then why would such an energy policy be acceptable?

What's happening in the Industrial Wind Energy business is actually worse than the made-up analogy here.

See "WiseEnergy.org/Carteret-Wind" for more information.

Some Carteret County Financials Implications due to the Mill Pond project

1) Possible Annual Permanent Job Impacts

	<i>Estimated</i>
Mill Pond Operation Job Gains	8
Tourism Related (@4%±) Job Losses	-120
<hr/>	
Approximate Total	-112

These do NOT include additional job losses due to:

- Business layoffs from the higher cost of electricity
- Military impacts due to mission disruptions, etc.

2) Possible Annual Economic Impacts

	<i>Estimated</i>
Mill Pond Carteret (Taxes + Leases) Income	\$700,000
Local Tourism Related (@4%±) Losses	-\$11,300,000
Bat Related Agriculture (avg) Losses	-\$2,700,000
<hr/>	
Approximate Total	-\$13,300,000

These do NOT include financial losses due to:

- The lower community employment
- Tax reductions from nearby property devaluations
- Health effects from turbines
- Health effects from insect proliferation
- Higher cost of electricity, etc.

See "WiseEnergy.org/Carteret-Wind" for more details.

Mill Pond & the Military

There are two primary conflicts that this project will likely cause the military:

1 - Physical obstruction to aircraft due to multiple 500± foot tall structures in frequently used airspace (e.g. the flight glide path to [Cherry Point runway #32](#), and [low-level flight missions](#)).

2 - Radar interference caused by these rotating 500± foot tall structures located in frequently used airspace. Note:

- a) Industry experts have categorized this situation as a [“severe interference”](#).
- b) Military experts have stated that this affects **both** the [pilot and ground control](#).
- c) Cherry Point officials have stated that there is [“no hope and no prospects”](#) for mitigation of this problem.
- d) For more studies and articles, see [this](#).

What citizens also need to know is that the current administration has directed that no active military personnel will speak out against any particular industrial wind project.

This means that no one at Cherry Point will specifically criticize the Mill Pond project — *but that does **not** mean that there are not serious military issues being caused!*

See [“WiseEnergy.org/Carteret-Wind”](#) for more information.

Why are the rules and regulations different for an industrial Wind Energy facility vs a Big-Box commercial project?

	Wind Facility	Big-Box
Land Area	Up to 10,000± acres	10± acres
Structure Height	Up to 600± feet	50± feet
Number of Structures	50 to 500	1 or 2
Zoning Area	Agricultural/ Residential	Commercial
Business Model	Obtain more taxpayer & ratepayer subsidies	Offer a better product at lower cost
Business Type	Limited Liability Corp	Corporation/LLC
Multiple LLCs over Lifetime	Yes	No
Future Business Structure	LLC with no assets	Corp/LLC with assets
Property Ownership	Usually Leased	Usually Owned
Product Life	15± years	50± years
Decommissioning Costs	\$5 Million to \$50 million	< \$1 million
Community Economic Impact	Net Loss	Net Positive
Community Jobs Impact	Net Loss	Net Positive
Devalue Nearby Property	Yes, Possibly Significantly	No
Safety Implications	Potentially Significant	Small
Human Health Implications	Potentially Significant	Very Small
Wildlife Implications	Potentially Significant	Very Small
Environmental Implications	Potentially Significant	Small
Military Implications	Potentially Significant	None
Legal Ramifications	Complex	Fairly Simple
Amount of Time to Monitor, etc.	Very large	Small
Cost to Monitor, etc	Very large	Small

Every circumstance is slightly different. These scenarios are rather typical.

Simplified Overview

There are three normal areas where we evaluate the merits of an alternative energy business coming to our community. In our situation we've added a fourth (military) due to the exceptional importance of the military presence in coastal NC. If you carefully look at the [presentation slides](#), the conclusion about the *Mill Pond* project for these items is:

- 1- It is a technological net loser
- 2- It is an economics net loser
- 3- It is an employment net loser
- 4- It is an environmental net loser
- 5- It is a military net loser

The only reason the wind developer is in NC is due to 2007's [Senate Bill 3](#) — which forces NC utility companies to use a certain percentage of renewable energy, by certain dates.

The developer then piggybacks on this mandate to take advantage of generous federal taxpayer subsidies, and several other perks available in the system. This is how it is estimated that they will have tens of millions of profits on this project, per year — *and just for phase one*.

So why would our local, state or federal representatives be the slightest bit supportive of a scheme — whose only real benefit is to enrich Houston investors? Ask them.

See "WiseEnergy.org/Carteret-Wind" for more information.

Citizen/Environment/Military Protection Rating of State, County and Town Wind Ordinances

We need laws that protect citizens, the environment, and the military. How good are current NC laws? Here are the ratings:

	NC State Law (H484)	Carteret County Law	Newport Town Law
Property Value	0	10	10
Setbacks	0	10	10
Acoustics*	2	10	10
Environmental*	2	10	2
Decommission*	3	10	10
Miscellaneous*	3	6	6
Escrow	0	10	10
TOTAL=	10	66	58
TOTAL/Optimum=	17%	110%	97%

* In each of these cases the County or Town law is given credit for what is specified in the state law, which is underlying.

Some Notes —

The scale for each item is a 10 for optimum protections. An Optimum law would have a Total rating of 60, for 100%. [Bonus credit is given for any Miscellaneous points.]

These Ratings are as of 2/27/14 (i.e. after Carteret's 2nd law).

Citizen/Business/Environment Protection Comparison of State, County and Town Wind Ordinances

	NC Law (H484)	Carteret County Law	Newport Town Law
Property Value	None	Excellent	Excellent
Setbacks	None	5280 feet	5280 feet
Acoustics*	Minimal	35 dBA	35 dBA
Environmental*	Minimal	Excellent	Minimal
Decommission*	Minimal	Excellent	Excellent
Escrow	None	Excellent	Excellent
Miscellaneous*	Minimal	Some Extras	Some Extras
Height Limit	None	275 Feet	500 Feet

* In each of these cases the local laws are given credit for what is specified in the underlying state law.

Some Notes —

Property Value: developer reimburses nearby property owners for property value loss due to turbines, based on appraisals.

Setbacks are to property lines. Several studies show setbacks less than 1 mile expose nearby residents to health risks.

The Acoustic limit of 55 dBA is **100 times louder** than 35 dBA.

A 55 dBA limit does **not** provide needed infrasound protection.

Carteret requires independent Environmental testing; others don't.

H484 should specify more Decommissioning info.

"Extras" include liability insurance, indemnification, etc.

Escrow: a \$50k balance to pay all local govt administration fees, et

See discussion of Wind Law Options at WiseEnergy.org/legal-matters for information about the basic rationale for each of these provisions, including model words for each of these items. These are based on what has been successful in other communities in North America.

Writing An Effective Regulatory Wind Ordinance

One of the most frequent requests we get at Alliance for Wise Energy Decisions (AWED), is for help in writing a local industrial wind energy ordinance. This is about the **Regulatory** approach. Go [here](#) to see the **Prohibition** options.

Even assuming that the community has conscientious representatives, an industrial Wind Energy Facility (WEF) is a unique, highly technical area that local legislators rarely have expertise with. [Read [this](#) about how easy it is for legislators to get off track.]

A primary reason the [WiseEnergy.org](#) website was created was to educate citizens and their representatives on wind energy. When one researches the conclusions of communities that have thoroughly and objectively investigated WEFs, some **forty (40)** different areas of concern have been identified!

[E.g. Bethany (NY) citizens wrote a [superior report](#) on most of these.]

This document is to assist citizen-oriented legislators in doing a responsible, competent job in writing a quality wind ordinance. (Note: this material is our opinion — so do your own research and arrive at your own conclusions. We aren't lawyers, so have your attorney carefully review any proposed law.)

To begin with, the fundamental understanding is that: "In all planning regulations, the net social good produced from the activity needs to be accurately weighed against any local detriments." The reality is that there are **no scientifically proven net societal benefits from industrial wind energy.**

Next we believe in the [KISS philosophy](#). A key question: *is it better for a law to cover a lot of issues superficially, **or** a few done really well?*

We advocate the latter, and in our view, there are **five** KEY issues (out of the 40±) that a wind law needs to properly address. These are:

- 1) Property Value Guarantee
- 2) Turbine Setbacks
- 3) Acoustical Testing Standards
- 4) Environmental Assessment and Protections
- 5) Decommissioning

We know that circumstances and state laws vary, so this is a *general* set of suggestions. We also realize that it isn't difficult to make a case for addressing several other of the 40± issues in a wind law. If others are important to your community, and they can be covered well, great!

Is there an ideal existing wind law that you can simply copy and edit for your locale? Yes: the [Carteret County \(NC\) wind law](#) covers all five areas very well.

The [Newport \(NC: Article IX\)](#) wind law does a fine job on four of the primary areas (not #4). The [Sumner \(Maine\) wind ordinance](#) is close, in that they do a reasonable job in three of the five main areas listed above (not #1 or #4).

The WiseEnergy.org website has *hundreds* of applicable energy and environmental studies. Additionally, on the [Legal Matters page](#) it lists the wind ordinances of several communities that are worth reviewing.

If you are aware of a local or state ordinance that is very good, please pass it on and we will put it on that page. Here is a brief discussion of the main five items:

1) Property Value Guarantee —

AWED has a [whole document](#) of real estate reports and articles, conclusively demonstrating that there will likely be property value losses in the proximity of most wind projects. (Even a court ruled that [property values did decline](#).)

On the real estate page we have listed several examples of Property Value Guarantees. *(If you know of any other good PVGs please send them.)*

Although each of these has some merit, none fit our KISS criteria — so we've put together a simple, effective and reasonable [Property Value Guarantee](#). *Please look it over and send any suggestions for improvements.*

Note: in some locales there may be a legal hurdle to pass a proper PVG. In most cases communities do have authority to enact regulations that protect property values. As a PVG alternative consider increasing the property line setbacks to **2 miles**. A clever option would be to include both of these in a law and let the developer choose: 1 Mile Setback + PVG or 2 Mile Setbacks.

2) Turbine Setbacks —

There are several reasons to specify setbacks from turbines, and the most important reasons pertain to human health and safety. Three points to note:

- a) The definition of “non-participants” is important. Non-participants are any nearby property owners *who do not have turbines on their property*. If this is not spelled out, some neighbors might be considered as having been converted to “participants” just because they receive a payoff.
- b) Non-participating property setbacks should be from the *property line*, not a building. One of the reasons for this is that if it is only from an existing building, then it effectively prevents a non-participating owner from using or building on some portions of their property. This (using legal terms) amounts to a “taking” of the property owner’s rights.
- c) A fixed setback distance makes more sense than does a variable distance (e.g. dependent on the turbine height). One reason for this is that the noise impact area is not directly proportional to the turbine height. Appropriate ordinances have a fixed setback distance of at least **one mile** from any industrial turbines.

[Several studies and independent experts support a mile (or more) setback. This [study](#) concluded: “there is a significant probability of adverse health effects for human beings living within 1.25 miles of wind turbines”. See this [list](#) of some **forty** locations that presently have a mile or more setbacks, or studies that recommend such a distance.]

3) Acoustical Testing Standards —

“Noise” testing is intended to eliminate some proven human health issues. Unfortunately this is a very technically complicated area, so just specifying noise limits like 40 dBA is inadequate.*

A significant matter to understand ([read this](#)) is that audible noise is actually a secondary concern, as infrasound (inaudible) can be much worse. The World Health Organization states: “*Health effects due to low frequency components in noise are estimated to be more severe than for community noise in general.*”

AWED’s recommended acoustical terms and conditions are [here](#). Please:

- a) Read this two-part [wind noise study](#) done by three independent experts.
- b) Carefully study "[The 'HOW TO' Guide to Siting Wind Turbines to Prevent Health Risks from Sound](#)" to further understand the issue.

*Regarding the best simple number, the consensus is that it should be no more than 35, specifically: "Sound levels from the WEF shall not exceed LAeq 35 dB at the WEF property." However, there is much more to this than just a number, so please consider our whole [document](#).

4) Environmental Assessment and Protection —

This is about evaluating adverse environmental impacts. One would hope that environmental organizations would be leading the way here, but that has not been the case. The *American Bird Conservancy* (ABC) has been one of the most objective, but even their "[Bird Smart](#)" standards fall far from the mark.

One of the most problematic aspects of this issue, is that many state and local regulations leave it up to the wind developer to:

- a) hire their own experts,
- b) determine what environmental assessments are applicable,
- c) be honest enough to report the unvarnished results,
- d) mitigate the problems they have created,
- e) all with minimal or non-existent independent monitoring.

Such terms and conditions are only a superficial feel-good solution that is a recipe for environmental disaster.

The simplest and most effective modification is to have the developer give the money they’d have spent anyway, to the Community — which would then do the hiring and supervision of the experts. Note that this alternative is **no cost to the community**, and imposes **no additional costs to the developer** — but the results will likely be *dramatically different*.

Here are our recommended [Environmental Protection Terms](#).

5) Decommissioning —

Decommissioning payments and arrangements must be established before the project is approved for a variety of reasons. The reality is that the initial developer is not who the Community will be dealing with at the end of the turbines lives (15± years) — as they will likely be long gone.

What frequently happens is that after the developer reaps the major taxpayer funded benefits, they will sell their interest to another corporation. That process may repeat itself several times during the lifetime of the WEF.

Typically the Owner/Operator will be a LLC (Limited Liability Corporation) with few, if any assets — so suing for any funds can be a futile exercise.

Here are our recommended [Decommissioning Terms and Conditions](#).

Some Questions and Answers —

1 - How does the community recoup its costs (which can easily be over a hundred thousand dollars) for dealing with a WEF, over its lifetime?

We strongly recommend requiring an **Escrow Account** (suggested words are [here](#)). This is a much better arrangement than a fixed application fee (which can't hope to adequately cover all expenses). Keep in mind that the wind energy business is *extremely* profitable. [Here](#) is strong justification how a WEF is **very** different from other commercial businesses.

2 - When is the best time to write effective wind legislation?

The earlier the better, because an ounce of prevention is far better than a pound of cure. Also, writing a quality wind law *after* a project has been built, would not legally bind a pre-existing project. [The best recourse for fighting an existing wind operation is to sue. Here is an [example](#) where citizens were successful in having a court dismantle a wind project.]

3 - How do we know the experts hired by our community will be objective?

Look carefully at their past work. Feel free to contact AWED for names, as we have over 600 independent experts (mostly PhDs) in our network.

4 - What if our community already has a so-so wind law, is it too late to fix it?

No. The fact is that *any* law can be modified. Review this document for parts that are applicable for your situation, and then convince your local representatives to upgrade your community's wind legislation.

5 - What if our community doesn't have existing zoning laws, can a specific zoning law for wind energy be enforceable?

Not likely. To single out one problem area would probably be considered to be legally "arbitrary." The solution is to institute a more comprehensive zoning law, including wind energy.

6 - What about the concern that wind energy "can't be zoned out"?

Why isn't wind energy being proposed for any municipality (e.g. Cleveland)? Because Cleveland's zoning is such that wind development would not be allowed there (i.e. it is zoned out). Why should it be any different for a rural community?

7 - Is there any merit to having a community-wise noise ordinance?

Yes, if it is well-written. Such a law could defuse the objection that there are special WEF rules. Here is an [example](#) of such an ordinance.

8 - How about a wind moratorium?

There can be some merit for that. The advantage of a town passing a one year (for example) wind energy moratorium, would be to give the town more time to study the issue closer, and to write up a meaningful law. Here is a [story](#) about a community doing that.

9 - How about an outright wind prohibition?

When the whole wind energy matter is looked at objectively, a prohibition can seem like the best choice — as there are no proven NET benefits from industrial wind energy. The town of New Hartford (NY) passed such a 2013 [law](#). [Note their detailed reasons as to why they did it.]

10- What if a provision in our wind law is ruled to be illegal, etc?

Many laws have a [severability](#) clause in them. This means that if one provision is determined to be inappropriate, the remaining are still valid.

11- What if the state (like NY) has onerous regulations that obstruct effective local legislation?

The fact is that [most states](#) are Home-Rule. Start by passing an appropriate local wind law. If state legislators then take away that right (for local control), a lawsuit is probably applicable.

12- What if the initial assumption about us having conscientious representatives is not true?

In that unfortunate situation citizens have three basic options:

- a) use political pressure to encourage them to behave responsibly,
- b) [sue them](#), and/or
- c) elect someone else.

13- How does our Utility Commission fit in here?

In the US, most states have a public Utility Commission that oversees the energy business. This ought to be looked at as a second line of defense — after you have focused on writing a superior local wind law. [Note that some of these have special Consumer Advocate employees. They ought to be reached out to, as they could be valuable allies.]

Again, remember that this is our opinions, and we are not lawyers so none of the forgoing should be considered legal advice. Please consult with a qualified attorney before writing or modifying any laws, or taking any legal action.

We would appreciate [feedback](#) as to any improvements to this document.

Mill Pond: Plan of Action

(in approximate chronological sequence)

- 1 - See that Carteret Commissioners fix their *Tall Structure Ordinance*.
- 2 - Get the Tourism industry actively engaged on this peril to their business.
- 3 - Senior retired military need to step up here to represent the interests of NC military bases, since active military has been prohibited from speaking up. Mill Pond's impact on the [BRAC review](#) needs immediate attention.
- 4 - [ACT](#) needs to be much more proactive in fighting this serious immanent threat to Cherry Point's existence.
- 5 - Contact NCUC, asking that they follow their statutory requirements in reviewing Mill Pond. (Note: speaking in person is better than writing.)
- 6 - Contact the NCUC Public Staff to aggressively do their job as consumer advocates when the Mill Pond application is before the NCUC.
- 7 - Encourage Newport representatives to improve their good Tall Structure Ordinance protections (public hearing 1/9/14).
- 8 - Encourage DENR to abide by their Mission Statement in overseeing the execution of this first case in H484.
- 9 - Since this is a major economic liability to **all** NC coastal communities, Carteret should join forces with other coastal counties to see that they all have strong ordinances, and that they speak as one voice to the state.
- 10-See that Senate Bill 3 & H484 are fixed in the next NC legislative session. [Something very similar to H298 is needed for SB3.]

Some contacts —

- 1 - Bob Chambers [Newport]: <BChambers@starfishnet.com>
- 2 - Greg Lewis [Carteret Commissioners]: <Greg-Lewis@ec.rr.com>
- 3 - Chief Clerk [NCUC]: <ChiefClerksOffice@ncuc.net>
- 4 - Tim Dodge, esq [NCUC Public Staff]: <Tim.Dodge@psncuc.nc.gov>
- 5 - Mitch Gillespie [DENR]: <Mitch.Gillespie@ncdenr.gov>
- 6a-Senator Norman Sanderson: <Norman.Sanderson@ncleg.net>
- 6b-Representative Pat McElraft: <Pat.McElraft@ncleg.net>

See "WiseEnergy.org/Carteret-Wind" for more information.