Mr. Matthew Butler Ohio Power Siting Board

March 20, 2017

Re: Icebreaker Wind Case #16-1871-EL-BNG

Good Afternoon,

As LEEDCo and Fred. Olsen Renewables further attempt to move forward, it is CRUCIAL for the OPSB, the USACE, USCG, USACE and the ODNR, as well as rate payers in the region and all U.S. taxpayers to understand the consequences of allowing Icebreaker Wind to be allowed. The eventual desecration of Lake Erie will negatively impact all who live in the Great Lakes watershed region. This is especially predictable given that as recently as November 3, 2016, an Icebreaker Wind, Inc. poster for the Lakewood Park Woman's Club presentation calls the project "a demonstration-scale offshore wind facility", supporting previous statements regarding plans to eventually erect thousands of these gargantuan machines in the Lake.

For those who believe this project would supply affordable, clean electricity, look at the evidence:

Published by the Institute for Energy Research, published December 27, 2016:

The Block Island Wind Farm, a 30 megawatt facility off the Rhode Island coast, went into operation on Monday, December 12. The project consists of five large offshore turbines supplied by GE Renewable Energy and operated by Deepwater Wind.¹ Electricity generated by the turbines is routed via submarine cables to the 1,000 full-time residents of Block Island. It took years of state and federal policy-making, environmental impact assessments and town hall meetings for the Block Island Wind Farm to come to fruition due to its cost and the damage to the view. It cost \$300 million²—\$10,000 per kilowatt—over 10 times more than the cost of a new natural gas combined cycle unit. Further, it is 58 percent more costly than what the Energy Information Administration (EIA) expects a first-of-a-kind offshore wind unit to cost—\$6.331 per kilowatt. In fact, EIA's offshore wind costs are even higher than its advanced nuclear costs—by about 4 percent.

If this information is accurate, or even close to being accurate, there is **NOTHING** that justifies the cost for an add on, intermittent, unpredictable power source. The lack of reliable electricity generation is undeniable. In fact, this variation results in CONSTANT grid management to supply the demand for uninterrupted power generation. Conversely, on days with high winds, like winter nor'easters on Lake Erie, excess production must be dumped, or the turbines must be shut down to prevent spinning that results in fires or explosions. This ramping is **HIGHLY INEFFICIENT**, costly, and results in increased carbon dioxide production if fossil fuels provide the primary electricity source (keeping in mind that wind energy is merely additive).

Further, rate payers will also be paying for the coal, natural gas, nuclear, or whatever

traditional power source will be providing their primary (and reliable) electricity! There is no logical or reasonable explanation for doing this!

I will do anything that is basically covered by the law to reduce Berkshire's tax rate. For example, on wind energy, we get a tax credit if we build a lot of wind farms. That's the only reason to build them. They don't make sense without the tax credit. —Warren Buffett, The Wall Street Journal, May 4, 2014

According to Warren Buffet, perhaps there is! It is no wonder LEEDCo and Fred Olsen are developing this project and thus sacrificing rate payers and tax payers! And for what if not for *personal gain*?

No one can dispute the SHORT LIFESPAN of industrial wind turbines. Taken from an AP article by Dr. Larry Bell, endowed professor of space architecture at the University of Houston on March 6, 2017:

## **Short on Longevity. Long on Maintenance:**

A major study of nearly 3,000 on-shore British wind farms found that the turbines have a very short 12 to 15 year operating life, <u>not</u> the 20 to 25 year lifespans applied in politicized government and industry projections. The report also concluded that a typical turbine generated more than twice as much electricity during its first year than upon reaching 15 years of use. Performance deterioration for off-shore installations is even far worse.

The author, an Edinburgh University economist and former World Bank energy advisor, estimated that routine wear and tear will more than double the cost of electricity produced by Britain's wind farms in the next decade in order for the government to meet present renewable energy targets.

So, what happens as these turbines face intense storms, mechanical problems, or simply age out? The CAITHNESS WINDFARM INFORMATION FORUM collects and publishes annual data regarding industrial wind turbine accidents, as well as other important turbine updates, but qualifies published data stating that not all accidents are reported. Therefore, these numbers from **2016 alone** are possibly low, but still significant:

- 20 blade failure reports (meaning broken blades, blade fires, blade throw)
- 27 fires (starting at any part of the turbine), the highest one year number since reporting was initiated in the 1990s
- 11 structural failures, primarily turbine collapse- "Major component failure under conditions which components should be designed to withstand"

In fact, it was reported on January 5, 2017 in a German article:

*Credit:* Deutsche Welle | 05.01.2017 | www.dw.com ~~

## "In the past four weeks, four giant power-generating wind turbines in Germany have either toppled over or experienced broken rotary blades. Now the question is: How safe are wind turbines really?"

Try to imagine managing a turbine fire, explosion, or blade throw in the middle of the Lake. I cannot believe it is possible. In fact, onshore turbine accidents just burn and explode, as there is no current technique available to intervene in such an event. The Lake becomes a filthy industrial junkyard. Further, such an incident during recreational boating and fishing would pose a serious threat to human life.

Is this the future of Lake Erie? It most certainly will be if Icebreaker Wind is allowed to be built, ultimately followed by a gold rush type onslaught by other money hungry developers scrambling for a "piece of the pie".

These Great Lakes are life sustaining for millions of mid Atlantic residents, not to mention the regional wildlife. The life and health of both American and Canadian regional citizens are at risk here. It is time to say no to Icebreaker, and ultimately enact legislation forbidding wind turbines in the Great Lakes.

Respectfully Submitted,
Suzanne Albright
Principal, Great Lakes Wind Truth

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Summary: Public Comment in opposition filed on behalf of concerned consumer, Suzanne Albright (originally filed 3/22/2017) electronically filed by Docketing Staff on behalf of Docketing