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# COMMENTS ON "ICEBREAKER" WINDPOWER PROJECT TITLE EA-2045

October 16, 2016

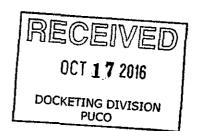
Attention Mr. Roak Parker, DOE Golden Field Office 15013 Denver West Parkway Golden CO 80401

Email: ProjectIcebreaker@ee.doe.gov

C.c. Mr. Matt Butler, OPSB

Email: ContactOPSB@puc.state.oh.us

C.c. Senator Bill Seitz C.c. Governor John Kasich



# Dear Mr. Parker, and the Officers of the DOE Golden Field Office,

Thank you for this opportunity for input to the DOE on the "Icebreaker" project. We write to express our extreme concern, ongoing concern, for a wind turbine project that has already been largely discouraged due to inaccuracies, insufficiencies, and fourteen deficiencies in the original LEEDCo permit application to the OPSB. It is abundantly clear that these "drive through holes" in the permit application show in our view an inability of the developer to not only protect the sensitive environment of the Lake,

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respect for migration routes, and mitigate challenges, but also an inherent lack of understanding of what these are, to this and future generations.

We respectfully remind the DOE of just some of those inaccuracies and deficiencies:

"Chairman Snitchler and the Ohio Power Siting Board (OPSB) yesterday presented LEEDCo (Lake Erie Energy Development Corporation) with a daunting TO DO list of insufficiencies, omissions, and errors in its application for 6-9 industrial wind turbines about 7 miles off the shore of Cleveland. The omissions include a formidable 14 item list:

- Ecological impacts studies for during construction and during operation
- Ice throw. Describe the potential impact from ice throw at the nearest properly boundary, including commercial and recreational uses of Lake Erie (i.e., fishing, shipping, military exercises, boating, swimming/diving, etc.), and the Applicant's plans to minimize potential impacts, if warranted
- Noise. Indicate the location of any noise-sensitive areas within one-mile of the proposed facility. Conduct studies and provide results that indicate negligible noise impacts to aquatic species
- An up to 10 year survey of projected population within 5 miles of the project site (which includes transmission lines and substations) "The applicant shall provide existing and ten-year projected population estimates for communities within five miles of the proposed project area site(s)."
- Studies of the technical data needed for lakebed topography and geography
- Traffic impact studies during construction and maintenance

Al Isselhard, of Great Lakes Wind Truth, who has worked for years to protect the Lakes from industrialization, explained, "We have to then assume that LEEDCo was completely unprepared to undertake the project at all. The irony here is that if they had done the proper homework, it still would have proven not to be a viable project."

#### Additionally:

Additional serious omissions or errors were noted in the environmental review materials provided by Kerlinger and Associates on behalf of LEEDCo. Letters

from ODNR and FWS indicate numerous "Contradictions, biases, omissions, and minimal assessments."

Points 19 and 20 point to the unscientific and biased and facile studies given to the OPSB by LEEDCo.

19. The boat surveys monitoring birds appear to be biased relative to the results provided through the acoustic surveys.

20. It was suggested that risks to birds migrating in the project area were minimal. Based on the pelagic bird surveys conducted by the Division of Wildlife during 2011 and 2012, the results suggest that the area proposed is within areas of larger numbers of ring-billed and herring gulls. Both migrating water birds and waterfowl may be impacted by this wind facility through direct impact as well as displacement.

Members of the Great Lakes Wind Truth group point to the fact that there are tens of millions of migrating birds and bats, possibly billions, that would be seriously impacted by even 6-9 industrial wind turbines at Cleveland. The Hawk Migration Association of North America and Rick Unger, past president and current advisor, of the Lake Erie Charter Boat Association, also expressed concerns to the OPSB.

Additionally, quoted in the <u>joint letter</u> is a statement about "... staggering environmental damages. From illegal bird death to radioactive waste, wind energy poses serious environmental risks that the wind lobby would prefer you never know about. This makes it easier for them when arguing for more subsidies, tax credits, mandates and government supports."

We have no notice that any single or multiple of these deficiencies has now been met. Some tax payers are reeling about the high cost of this prototype, "Icebreaker" project, which in the end may meet or exceed 150 million, that does not seem to even have covered off prior noted serious omissions and errors and deficiencies. We attach several documents or links to documents written by members of the Great Lakes Wind Truth organization, one of which encompasses signatures from hundreds of interested persons and organizations. One of these organizations, NA-PAW (North American Platform Against Wind Power) represents over 350 North American anti wind groups, and liaises daily with European counterparts numbering in the thousands of agencies, and millions of persons. Other notable signatories to the <u>Joint Letter</u> are:

Suzanne Albright, Founding Member, and Principal, Great Lakes Wind Truth; Dawn Davis, Save Our Skyline OHIO Mark Duchamp Save the Eagles International <u>www.savetheeaglesinternational.org</u> Chairman, World Council for Nature<u>www.wcfn.org</u>

Al Isselhard, Founding Member, and Principal, Great Lakes Wind Truth Great Lakes Concerned Citizens Coalition On Article X, Lake Ontario Riparian Alliance (Wolcott, New York)

Sherri Lange, Executive Director, Canada, Great Lakes Wind Truth; VP Canada, Save the Eagles International; Founding Director, Toronto Wind Action; CEO NA-PAW (North American Platform Against Wind Power, over 350 member groups) <a href="www.ng-paw.org">www.ng-paw.org</a>
Captain Tom Marks Tom Marks is a past president of the Southtowns Walleye
Association of WNY, Inc., the largest Walleye club in North America. Marks is a past
President of the Lake Erie Chapter of Fly Fishers Federation. Marks fills many other roles
promoting and protecting the Great Lakes Fishery. He is the New York Director for the
Great Lakes Sport Fishing Council, and a member on Buffalo's Niagara Sport Advisory
Commission. He is a graduate of the Sea Grant Great Lakes Leadership Institute. Marks is
the only non-scientist member of the Lake Erie Botulism Task Force, a member of the
Buffalo River Walleye Restoration Program, and is a member of the NYS Conservation
Council, to mention just a few associations. NY Director \*Great Lakes Sport Fishing
Council; Director, Great Lakes Wind Truth \*The Great Lakes Sport Fishing Council
represents thousands of boaters and fishermen throughout the Great Lakes to various
government organizations. We are a bi-national organization.

**Rick Unger,** Advisor, Past President, Lake Erie Charter Boat Association (LECBA) **Tom Wasilewski,** Great Lakes Wind Truth, Coordinator of the Northwestern PA Eagle

Conservation Association in Edinboro, PA; Long-time hawk, eagle, and other bird

watcher in Conneaut, Ohio

Jim Wiegand, Wildlife Biologist, Wind Industry Research Analyst Charlie Wright, Deputy Mayor, Leamington, Ontario, Canada; (Leamington, home to Point Pelee, site of tens if not hundreds of millions of migrating birds), Leamington, Ontario

We mention this partial list of signatories because we wish to emphasize the heft of concerns in direct comparison to the somewhat weak attempts by LEEDCo and now Fred Olson Renewables USA, to inform the public that there is support for this offshore fresh water project.

We understand a photo op (with Sierra Club) of persons outlining the shape of a turbine (Come help create a human turbine) recently had to be postponed initially due to lack of participants. We also believe that the Take the Power Pledge, 2013, which is quite a misnomer and fictitious representation in itself, has turned out to be disappointing for the developers. The support that seems to be in place, is industrial, civil and federal agencies, who likely are in the income stream for this project. (If we do the math on the Power Pledge, which alleges to have obtained 8,000 plus pledges, from people willing to pay \$12.72 more per month on their hydro bills, and only place those votes against the population of Northwest Ohio of about 4,335,920 (2010), the pledges then amount to .0018%, net zero. This Power Pledge has been yet another gimmicky advertising

ploy to convince voters that the project has public support. Nothing could be further from the truth. Nothing. Talk to the people outside Toledo, Cleveland, people who reside and work in shoreline communities, or farms, or who work in other industries far from urban centers, those who have formed protective groups, advocacy groups for health and the environment: To name a few: Auglaize Neighbors United, Auglaize Neighbors United to Preserve and Protect Auglaize County, Champaign County Wind, Darke County Wind Worriers, Fight the Wind: Hardin and Login County Residents United against the Scioto Ridge Wind Project, Greenwich Neighbors United, Neighbors United, Protecting Our Communities, No Turbines in Town, Save Western Ohio, Shelby Neighbors United, Wind Truth Alliance, Wind Worriers.

Before we address the environmental impacts which we have alluded to already, we wish to address a few environmental fallacies driven by this industry, fallacies that still seem to control the message and advancement of turbines. This LEEDCo, or now Icebreaker Windpower Project, uses the same mythology, to promote its fantastical possibility of cleaner electricity.

### CO<sub>2</sub>

The myth that industrial wind complexes will benefit the environment and even "save the planet," are rooted in a series of misrepresentations, not the least of which centres around the possible reduction of CO2.

C02 only represents a minute fraction of GHGs, and indeed is not a pollutant, and has been vilified and demonized with abandon, in order to provide high level emotional status to the fight for the proliferation of industrial wind. However, we will nonetheless point out that world wide, not a single Coal Fired plant has been closed due to the manufacture and spread of industrial wind, and the conversation about CO2 abatement has been notoriously not in the developers' favor. So far, Germany has spent hundreds of billions on renewables, only to discover energy chaos, loss of manufacturing bases due to the high cost of power, and the ever elusive CO2 mission, well, as one says: unobtainable, immoveable, because you always need backup. Germany is refitting and building coal fired again, at a fast rate. In 2013 Germany's carbon emissions rose1.8%. As one notes, it is not surprising that the energy portfolio in Germany is now referenced as "a marketing slogan, not a coherent policy."

## INDUSTRIAL WIND IS (NOT) CLEAN

Much has already been written about the dangers of polluting 20% of the world's remaining fresh water reserves. The fact is that wind turbines are manufactured. transported, maintained, and sometimes, rarely, decommissioned, all using fossil fuels. An average 2.5 MW turbine can contain upwards of 600 gallons of oil and lubricants, which leaks and has to be replenished. Maintenance includes debugging the blades and cleaning the shaft or column which has streaking of oil and lubricants; there are vivid images of helicopter assisted cleaning available on You Tube. Lack of cleaning can reduce efficiency by 30%. Please remember that decommissioning is rarely achieved, and we can imagine that offshore the costs would be prohibitive. There are now "mountains of industrial eco junk" accruing: carbon blades cannot be recycled, and only recently are some attempts being made to recover materials. In FRESH WATER, we would have these end of life carbon blades, non recyclable, towers of various resin coatings and steel frames, underwater supports degrading over time, and the rare earth minerals, highly toxic, in the magnets of the turbine. Who will retrieve and recover all of these materials, toxics, so they do not end up in water supplies? There is absolutely NOTHING ecologically friendly about an industrial wind turbine. It is designed for one thing: profits.

(An article on chemical safety and turbines (2015) in Wind Power Engineering, addresses the need for MSDS (materials safety data sheets) to be available at all times at wind turbine sites, and indicates that "Even though wind turbines don't use combustion to generate electricity, and therefore don't produce air emissions, there are still risks of toxic or hazardous materials in lubricating and hydraulic oils, and insulating fluids (our emphasis). Turbine components, such as blades, rotors, and compressors, also need upkeep and cleaning, and while many non-hazardous, biodegradable cleaners exist, that's no guarantee they are used on every turbine." The article continues to express that additional chemical hazards are implicit during construction and maintenance. How would a spill be mitigated off shore? How would containment be provided for regular maintenance of the turbines?)

Additional costly environmental hazards for this offshore fresh water proposal would be: Restrictions to boaters, especially in high winds; anchoring activities, will dislocate toxic elements and stir the drinking water for millions, and endanger aquatic life; there will inevitably be ILFN which does not dissipate or devolve quickly over water, and in cases will be amplified, affecting residents along the shores and inland; shadow flicker will be problematic to boaters; nighttime boaters will be at risk; obvious risk of contamination from cable excavation; effects to marine life of construction and electromagnetic fields; a final legacy after a short run of maybe 15 to 20 years (the lifespan is not 25 years before mechanical failure sets in, but 10-15) of eco junk, left to rot in the Lake, an embarrassing testament to lack of constraint and forethought.

# DESTRUCTION OF AN ECOSYSTEM: MIGRATION MIGRATION

Overwhelming evidence has been formerly brought forward to the OPSB concerning possible and inevitable damage to the fragile eco systems of Lake Erie. We remember that this "incubator" project, once referred to by Ms. Kaptur as a possible "Saudi Arabia," intends to spawn more like projects, up to we hear, 1700 industrial machines in this one Lake. This must never happen. We reject the application of a single turbine in Lake Erie, or any of the Great Lakes.

If one requires a vivid example of a failed Lakeside (Ontario) project (which may as well be IN the Lake), please reference Wolfe Island, 86 turbines that continue to chop and devour birds and bats, despite warnings at the outset that this would prove an environmental disaster. We must remember that the mortality, even though reported to be "unacceptable and disastrous," was counted as ever by the developer or his paid consultant, in this case, Stantec. We now know that under reporting is the norm; and some say the cover-up of the massacre is now nearly 99%. We now extrapolate mortality figures based on those from Europe, per turbine and per similar project, and it is very safe to say that in the US alone, between 13 and 31 MILLION birds and bats are destroyed due to industrial wind: these are not the numbers provided by USFWS, a mere 585,000. (As noted by wildlife and wind energy analyst, Jim Wiegand, "The Wolf Island mortality studies used search areas of only 60 and 50 meters. These studies missed most of the carcasses.")

The Atlantic Flyway, offers a resplendent display of Nature's Rush Hour, according to Leigh Patterson. (More than 12 million, likely many more tens or as some say, hundreds of millions, use this flyway, for one.) Writing in Migration Week, she and others explain how some species may use several flyways, such as the Mississippi Flyway as well as the Atlantic, and that the variables are as mysterious as yearly changes in diet and weather. This miracle of flight will inevitably be impacted upon by anseriformes (ducks, swans, geese and relatives), songbirds, raptors, bats alike. This high octane movement of life above our heads invites tourism dollars, and spiritual regeneration for all. 90% of Canadian birds do not winter there, and the flux of the Great Lakes becomes a stop over or pass through or even residence for sustenance and breeding. Many species of anseriformes winter out on the Lakes about 4 km. As noted by Dr. Scott Petrie, of Long Point Waterfowl fame, we should not be considering

industrial wind in or near any of these breeding areas. The Ontario MNR (Ministry of Natural Resources) Significant Wildlife Habitat Technical Guide indicates: that any development must: "protect the area of the site and existing significant (migratory stopover) sites should be protected in their entirety and not reduced in area....Great Lakes shorelines (especially Lake Erie and Lake Ontario) are very important." We consider this project given its proximity to the shore, to fall into this call for protection.

It is easy to assume that industrial wind turbines out in Erie by about 7 miles or less, will actually become stopovers. Female bats are now known to search for roosting sites after a birth cycle, and bats in general are attracted to the insects that accumulate on the blades and nacelles. This is as is now well known, a fatal attraction. It is no longer White Nose Syndrome that is the number one killer of bats: it is industrial wind turbines. We cannot emphasize enough that the turbines proposed offshore at Cleveland, will undoubtedly attract bats. (Dr Paul Kerlinger's report on behalf of LEEDCo, indicates that there is "nil" chance of the Indiana Bat migrating to the possible roosting at the turbine sites. The 2013 report predates more recent information that females do indeed see turbines as possible new roosting sites. He also points to "best practices" that he encourages the developer to employ with respect to lighting on the turbines. We respectfully submit that Drs. Curry and Kerlinger are employees of the wind industry and that the reporting is paid for by the industry, and of course becomes industry favorable material. It is also Dr. Kerlinger who filed a report in Toronto Canada for the now famous and ignoble demonstration turbine the CNE turbine. In that study, there were merely two dead birds, and the study was terminated just before migration began. This was noted by the officers of FLAP, Fatal Light Attraction Plan, of Toronto.)

#### Dr. Kerlinger does admit:

"That bats migrate across Lake Erie was confirmed in a study that McGuire et al. (2012, cited by Pelletier et al. 2013) conducted at Long Point. They placed radio transmitters on 30 Silverhaired Bats in August-September. Migration was found to occur in two waves, in late August and in mid September, and stopover duration was only 1-2 days. Departure directions from Long Point were recorded for 24 of the individuals under study. Eight (30%) departed along the lakeshore in a westerly direction, four (20%) along the lakeshore in an easterly direction, and 12 (50%) over the lake, where the minimum crossing distance was 38 km (23.6 miles)." (Our emphasis)

It is safe to assume that bats of any variety may wish to feed on the insects trapped by light and safety features at the turbines in Lake Erie. (Please also note that several projects near the Internationally recognized hiber-nacula of Montagne Saint

Pierre, for example, near the Belgian Dutch border, were turned down due to bat conservation considerations.)

Bats reproduce slowly, most species one pup per year. World wide declines are reported in similar fashion: turbines, White Nose Syndrome, and loss of habitat. It is little known that bats are responsible for 90% of the reseeding of the rainforests, and it is quite well known that bats devour about 600-1000 insects per hour per animal, thus providing Nature's perfect insecticide without chemicals. The dollar value of bats to agriculture has been estimated in North America to be around 3.7 BILLION per year. (It is again estimated that some losses to bat colonies in the USA are upwards of 90% of significant roosts, and that even two of these losses if not realized, could have contributed to removing 600,000 pounds of insects per night!)

Reports of dangerously high impacts to bat populations are now accumulating. In 2004, a six-week study at 44 turbine Mountaineer Wind Farm estimated that at least 1,364 bats were killed, between 1,364 and 1,980, and that it was noted that 70% were scavenged within 24 hours. In an article, <u>Battered by Harsh Winds</u>, Must Bats Pay the Price for Wind Energy? Merlin D Tuttle succinctly asks if the cost to wildlife can ever be worth the carnage.

"The \$60,000 thermal imaging cameras set up at the Mountaineer Wind Energy Center in West Virginia showed bats approaching the electricity-producing turbines almost like curious kittens enchanted by a tumbling ball of yarn. When the blades were spinning at their standard 17 revolutions per minute (rpm), the results could be and often were fatal. Yet bats sometimes chased harmlessly after the tips of slow - moving blades as though investigating the inexplicable devices that proved neither prey nor bat. Some bats actually landed on stationary blades, suggesting curiosity about potential roosts or sources of insects."

Mr. Tuttle concludes: An energy source simply cannot be "green" if it kills thousands upon thousands (or millions) of bats."

<u>Threatened or endangered species for OHIO include</u>: all counties, Indiana Bat, Northern Long-Eared Bat, the Kirtland's Warbler, the Piping Plover, to name a few. The Indiana Bat is federally listed as endangered, the Eastern Small Footed Bat is federally listed as of special concern. The Indiana Bat is also endangered in Ohio.

### ICEBREAKER OR ECOLOGICAL DUSTBIN

In summary: industrial wind does not work, does not produce reliable electricity. It always requires backup. Lots of backup. It itself is a child of fossil fuels, and requires fossil fuels to maintain its existence. It contains toxic substances, and as noted, is often maintained with noxious and dangerous chemicals, lubricants. It is impossible to know about rare earth elements from China, and <u>industrial wind's dirty little secrets</u>, and still think, "green" and useful. There are over 8,000 parts to a turbine, and some of these are steel, cast iron, concrete, resins, lubricants, and magnets made from neodymium and dysprosium. The sad fact is that we have been sold a bill of goods, that this relatively primitive mechanism, a highly subsidized industrial wind turbine, is nothing in the end but a dangerous chimera, and in the final end, will prove to be a vast and well publicized display of organized shame.

There are a few and temporary jobs from an installation, and much of the manufacture of turbines is not in the US. Net jobs are lost as in Spain, the UK and Italy, to the extent of respectively 2.2, 4, and 5.4 per so called "green" job. And Spanish "green jobs" cost 1.3 million each. The air is not cleaner because of wind turbines. They are not safe, green, clean or free. The damage is at this point incalculable and ongoing. We find it very problematic to refer to Lake Erie as a "Saudi Arabia" of opportunism. The Lakes are an ecological treasure, for the world, not only for Ohio.

Using fallacious statements about CO2 abatement and cleaner air, a few temporary jobs, and using public money of historic proportions to advance an antique and now highly discredited industry, is problematic. Please immediately stop any and all funding, require the developer(s) to provide audits of how they have managed DOE funds, provide those reports directly to the public in real time, and stop advancing this LEEDCo/Fred Olsen Lake Erie disaster immediately. We do not subscribe to the break a few eggs to make an omelette theory of the environment. This Lake Erie breaking of eggs will be a forever breaking, with nothing at all to gain, ever. We have an opportunity to prevent a disaster from happening. Please use all of your authority to end this attempt to pollute and industrialize Lake Erie.

Our custodial responsibilities come first and must prevail.

Thankyou.

### Sincerely,

Sherri Lange CEO North American Platform Against Wind Power Executive Director Canada, Great Lakes Wind Truth VP Canada Save the Eagles International Founding Member, Toronto Wind Action

www.na-paw.org kodaisl@rogers.com