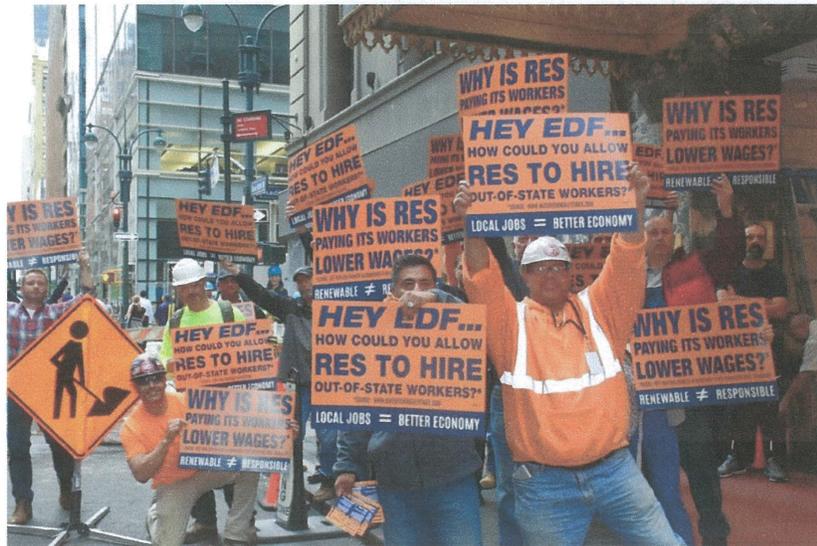


GROUPS AND INDIVIDUALS OPPOSED: LETTERS OF IMPORTANCE



GROUPS and individuals OPPOSING ICEBREAKER

(This is a partial list)

Toronto Wind Action (255 members)

Ontario Wind Action (as above)

NA-PAW Over 350 member groups and over 2 million individual members

Great Lakes Wind Truth 85% US based at this time

Save the Eagles International

Save Our Beautiful Lake

Monica Essenmacher of Port Crescent Hawk Watch in Michigan.

Michigan Boating Industries Association, 365 members

Save Our Shores, Orleans County

Lake Erie Marine Trades Association (Lake Erie Marine Trades Association is a trade association of 100 plus boat dealers, marine operators, and service companies based in Cleveland.)

Interstate Informed Citizens Coalition, Kevon Martis, MI

Nicki Polan, Executive Director of the Michigan Boating Industries Association of Livonia, Michigan.

Greg Schmalz, Ontario Canada STOP, Saugeen Shores Opposed to Wind, Saugeen Turbine Operation Policy

Mark Davis on behalf of the MMWTWG Multi Municipal Wind Turbine Working Group; a coalition of councils across Ontario, including shoreline communities at Lake Erie

Lorrie Gillis on behalf of Wind Resistance, and Wind Action, and Ontario Regional Wind Turbine Working Group as well as Blue Highlands Community Coalition

Shellie Correia on behalf of Mothers Against Wind Turbines, Inc.

Kim Kaufman and Michael Hutchins ABC and BSBO

Amherst Island, APAI Association to Protect Amherst Island

Hundreds of individuals

Groups who signed onto the anti-LEEDCo 2014 letter are:

Great Lakes Wind Truth; North American Platform Against Wind Power; Save the Eagles International; Save Our Skyline, Ohio; Great Lakes Sports Fishing Council (Tom Marks); Charter Boats Association of Lake Erie (Rick Unger); Jim Wiegand, Wildlife Biologist; Partnership for the Preservation of the Downeast Lakes Watershed; Protect Our Lakes; Officers of Erie County Federation of Sportsmen's Clubs and Western New York Environmental Federation; Whitley County Concerned Citizens; Laurel Mountain Preservation Association; Port Crescent Hawk Watch Ontario Regional Wind Turbine Working Group;

Preserve the Wellfleet; Members of the Presque Isle Audubon Chapter in Erie, PA; Green Acres Sportsman's Club; Save Our Allegheny Ridges; Deputy Mayor Cavan Monaghan, Ontario; Deputy Mayor of Leamington, Ontario; IICCUSA (Interstate Informed Citizens Coalition USA); NO WIND ALABAMA MEMBERS; Huntington County Concerned Citizens; Manvers Wind Concerns City of Kawartha Lakes, Ontario; Auglaize Neighbors United;

Members of Concerned Citizens of DeKalb County IN; Synergy Energy Inc.; Ohioans for Affordable Electricity;

PLUS approximately 100 individuals; this list now numbers in the thousands

HMANA (Hawk Migration Association of North America) sent its own letter asking refusal of the permit).

Additional international opposition noted on Great Lakes Wind Truth, and in the media.

<https://lfpres.com/2016/10/23/offshore-wind-plan-in-lake-erie-criticized-internationally/wcm/ed83f5cb-0238-4571-19f3-2d41284bd103>

Spain, UK, Germany, DK, France, etc. France has over 1500 anti wind groups. EPAW, the European Platform has over 800 groups with several hundred thousand members. They have also expressed deep objection.

See this link for letters of importance.

<http://greatlakeswindtruth.org/category/newsworthy/>

[Suzanne Albright on behalf of Monarch butterflies](#)

<http://greatlakeswindtruth.org/newsworthy/birding-group-opposes-lake-erie-icebreaker-kim-kaufman/>

<http://greatlakeswindtruth.org/newsworthy/great-lakes-scuttlebutt-norm-schultz-where-do-you-stand/>

<http://greatlakeswindtruth.org/newsworthy/shawn-graff-vp-great-lakes-region-abc-writes-on-migration-and-lakes/>

From the perspective of wildlife conservation, the Great Lakes are one of the worst possible places to put wind energy. During spring and fall, vast numbers of birds and bats, many of which migrate at night, gather along the shorelines and eventually fly along or over the lakes during their annual migration to and from the boreal forests of Canada where they breed. Advanced radar studies in New York, Michigan and Ohio conducted by the U.S. Fish and Wildlife Service have all confirmed the danger that large-scale wind energy development poses to migratory birds and bats in the region. The Great Lakes themselves are also an important habitat for water birds. Large-scale commercial wind turbines have the potential to threaten or displace them.

<http://greatlakeswindtruth.org/newsworthy/flying-animals-deserve-to-be-safe-over-lake-erie-suzanne-albright/>

“AVIAN SLAUGHTER: In its assessment submitted to the OPSB in response to the first Icebreaker proposal (then Case # 13-2033-El-BGN), the USFWS stated, “The waters around Cleveland provide important overwintering habitat for gulls (herring, ring-billed, Bonaparte’s, great black backed), ducks (greater and lesser scaup, red-breasted and common mergansers, goldeneye, bufflehead, redhead, canvasback), common loons and horned grebes. During winter, flocks of over 10,000 birds are not uncommon...” **The document goes on to describe Icebreaker documents citing European offshore wind energy experience, but fails to mention that several European countries have banned offshore wind facilities from within 12 miles of the shoreline, suggesting this is likely due in part to the congregation of waterfowl nearer to that from shore!** Even LEEDCo’s own environmental assessment reported that between 4-13% of migrants fly within the height of modern turbine rotors and that ten to hundreds of millions of birds migrate over Lake Erie! The USFWS states, **“Based upon these numbers it would mean that between 400,000 to 13,000,000 songbirds fly at rotor swept height when flying over Lake Erie.”** The Service also stated, based on radar studies of Lake Erie’s southern shore, that “vast numbers of birds and bats migrate along the shoreline and TRAVEL ACROSS THE LAKE.” And whether radar or other sophisticated studies, particularly those studies submitted by the wind industry, claim the Project area is not heavily used by migrants, it will not matter. Different avian species do not follow the same path every year. High and low air pressures, temperatures, wind speed and direction, all impact migratory routes. Where are five-year studies by LEEDCo that prove low numbers in the Project area? I don’t believe any exist. Even if they did, they would be much less valid than if done by an entity NOT paid by the wind developer. Even more troublesome, reporting of avian deaths by wind turbines are tracked and reported by the wind companies, not by government at any level, by independent contractors assigned by government or other neutral parties. It is commonly compared to “hiring the fox to guard the hen house.” Carcass counting is typically performed on a schedule, like 8 hours once every 30-60 days, and within a strictly defined parameter. In a Great Lake, it would be impossible to track, with carcasses being washed away or sinking. That is why the number of U.S. avian deaths by turbines vary between 585,000 per year (USFWS) with bats much higher at 800,000 per year, and somewhere between 13,000,000 and 31,000,000 (Spanish Ornithological Society). No one knows!

SAVE OUR LAKE!

from industrial development of 1450 giant wind turbines

Attend the Public Hearing

Thursday, July 19th at 6:00 pm

Cleveland City Hall - Council Chambers

LEEDCo and ICEBREAKER have plans to make a "gusher" of wind energy out of Lake Erie. This is NOT just six lonely turbines: it is promoted to be the "Saudi Arabia" of wind, up to or more than 1400. Each turbine will contain 400 plus gallons of oil and/or lubricants, which leaks and has to be replenished.

This "demonstration" proposal would create an airspace barrier, creating killing fields for flying animals, disrupting the wonders of lake Migration, creating electromagnetic fields around the connecting cables with unknown consequences, and destroy pristine vistas and Lake enjoyment.

Turbines within a view shed, downsize property values.

They will also, without doubt, create dangers to users at the Burke Lakefront Airport.

Contact: Save Our Beautiful Lake or Great Lakes Wind Truth (websites) - <http://saveourbeautifullake.org/> OR www.greatlakeswindtruth.org

<http://greatlakeswindtruth.org/newsworthy/winds-of-worry-us-fishermen-fear-forests-of-power-turbines/>

<http://greatlakeswindtruth.org/newsworthy/american-bird-conservancy-and-bsbo-black-swamp-bird-observatory-comment-on-november-8-meeting-leedco-icebreaker/>

For all these reasons, we implore you to judge this project on the cumulative risk to birds and bats posed by the potential for thousands of turbines in Lake Erie, and require appropriate independent risk assessment by an EIS before discussion of issuance of any Certificate of Operation.

Please find attached, our review of the DOE Environmental Assessment and its supporting documents concerning birds and bats. A link to our comments is, here:

http://www.bsbo.org/uploads/3/0/8/0/30807041/doe_ea_comment_document_bsbo_ab_c.pdf

We believe the EA to be inadequate to assess the risk to birds and bats, and we further point out that that the U.S. Fish and Wildlife review of the EA echoes most of our serious concerns.

<http://greatlakeswindtruth.org/newsworthy/offshore-wind-rough-waters-for-leedco-demonstration-project-environmentalists-rise-up/>

It is surprising that the OPSB has not closed the file on the now called “Icebreaker Windpower.” Much of the testimony in support of the proposal centered on job creation for Ohio, something that has noticeably not materially happened worldwide with wind projects.

Block Island, the US’s first offshore project of five massive and expensive turbines, reportedly created few hundred temporary construction jobs and about six permanent at a cost of \$290 million, or \$150,000 per powered household. This project is a monument to waste, an argument *against* offshore wind, not a demonstration project of any value.

<http://greatlakeswindtruth.org/newsworthy/osage-chief-standing-bear-wind-farms-cause-cultural-economic-damage/>

The Osage Nation will oppose wind farms forever based upon these reasons. We will show our opposition in every way possible, including public statements, advocacy and by legal means if necessary.

Another cultural example is the Osage belief that the horizon is a sacred place where the gates of heaven are open at sunrise and sunset. We don’t have time for a full cultural lesson here, but suffice it to say the horizon is a very important spiritual element for the Osage. You can then imagine that a long string of wind turbines littering the landscape destroys our connection to the horizon and disconnects us from our ancestors.

The economics of wind farms are poor to say the least. These facilities are not financially sustainable without Oklahoma tax credits, which are scheduled to pay out until 2030. Over the next 12 years, those payouts may be as high as \$4 billion. With an overall state budget shortfall of \$9 billion, we cannot afford to subsidize these wind companies, most of which are not Oklahoma-based and at least one is not even U.S.-based.

<http://greatlakeswindtruth.org/newsworthy/new-ohio-epa-tests-find-toxic-sediment-on-lake-erie-bottom-may-be-spreading/>

<http://greatlakeswindtruth.org/newsworthy/al-isselhards-editorial-re-leedco-oct-12-2016/>

collects data from hundreds of affiliated raptor monitoring sites throughout the United States, Canada and Mexico, and publishes a journal “Hawk Migration Studies” that includes data from participating hawk watches as well as articles on raptor conservation and other issues impacting raptors.

HMANA is concerned about the threat posed by industrial wind energy developments to migrating, nesting and wintering raptors. Some industrial wind energy developments have been clearly demonstrated to cause high mortality rates in a variety of raptor species, frequently as a result of inappropriate siting. It appears that the project proposed by LEEDco for Lake Erie waters may be such a project.

HMANA’s wind power policy strongly advises against wind power development in areas with landscape features known to attract raptors (such as coastlines), in areas formally designated as Important Bird Areas, and in areas that experience concentrations of wintering, nesting and migrating raptors. The offshore waters of Lake Erie have been documented as an important foraging area for several species of raptors, the coastline also constitutes a landscape feature known to attract raptors. During migration, sometimes large concentrations of migrating raptors are reported over water and may be at risk from offshore windpower development. The studies that have currently been completed for the LEEDco project are insufficiently robust to evaluate this risk.

The offshore waters of Lake Erie appear to be a poor location from the point of view of raptor conservation. But if it were not disqualified for wind development on the basis of landscape features or concentration of wintering, nesting or migrating raptors, then HMANA’s policy advises that specific, stringent, multi-year pre-construction studies be undertaken. These studies should be coordinated with post-construction mortality studies, designed by qualified and independent consultants in collaboration with national and provincial regulatory and conservation agencies, appropriate non-governmental conservation and scientific organizations and independent experts. The design and findings of such studies should be peer-reviewed and publicly accessible. Multi-year studies of this quality do not appear to have been undertaken for the LEEDco project.

Because of the above concerns, an industrial wind power project as proposed by LEEDco should not be allowed in the offshore waters of Lake Erie at this time. As mentioned above, I attach HMANA’s policy statement on wind power development.

<https://mlwindaction.org/2013/03/11/southern-ontario-tundra-swan-spring-migration-through-wind-projects/>

New battle for Lake Erie starts tonight

NORM SCHULTZ

JUL 19, 2018

Ohio boating organizations will pack a hearing of the Ohio Power Siting Board to blast a recommendation that would give the green light to build wind turbines off Cleveland.

It will be the first barrage in an all-out battle to save Lake Erie. Ohio boating organizations will pack a hearing of the Ohio Power Siting Board tonight to blast an OPSB staff recommendation that would give the Lake Erie Energy Development Corp. the green light to build wind turbines off Cleveland — a project known as Icebreaker.

“The staff recommendation to approve Icebreaker, even taking into account noted conditions, should be rejected outright by the OPSB’s seven voting members,” Tom Mack, chairman of the 100-member Lake Erie Marine Trades Association, will tell the hearing. “What’s missing is the most critical analysis of all — whether there is any justification to risk impairing an already fragile Lake Erie by blighting it with industrial-size windmills.”

Other large boating groups, including the Boating Associations of Ohio and the Greater Cleveland Boating Association, will join LEMTA in declaring that most people haven’t been given enough information about LEEDCo’s initial six-turbine demonstration plan. The end game is to stimulate construction of hundreds more turbines in Lake Erie.

Ohio boaters and anglers will voice critical concerns about the construction and operation of the 500-foot-tall turbines. They will pose serious navigational hazards. Moreover, while they won’t be sited in commercial shipping lanes, building hundreds of turbines will monopolize huge areas of water that will be designated closed to boating and fishing for security reasons.

“Myriad other environmental issues add even more red flags,” says Bryan Ralston, executive director of the Boating Associations of Ohio. “It’s known that a new giant suction cup technology will be employed to build the towers. This will result in the release of caustic substances currently dormant in the lake’s bottom sediment. In addition, no attention is being paid to similar results when laying the transmission lines from the

towers to the electric grid on shore, disturbing many more miles of sediment and threatening the 21 million people who get their drinking water from Lake Erie.”

That’s just the beginning of the environmental dark side. It’s also known that collisions with land-based turbines in many areas of the country are killing thousands of birds and bats annually, including bald eagles. It’s almost a certainty that turbines in Lake Erie would be in violation of the Migratory Birds Treaty Act. The American Bird Conservancy contends the Great Lakes are among the worst possible places to install wind turbines. Lake Erie, in particular, is known to be a major migrating flyway as well as a major habitat for water birds. In fact, the lake was recently designated a Globally Important Bird Area because of the large numbers of water fowl.

Finally, testimony at the hearing will contend that people haven’t been told that the economic value of Icebreaker simply isn’t there and never will be. Indeed, LEEDCo has existed for more than a decade solely because \$50 million in taxpayer-funded grants have enriched the few connected to it. It could never stand on its own. Just the need for backup reserve energy for times when the wind doesn’t blow enough will greatly increase the capital and operating costs of this offshore wind power. Unknown maintenance issues, especially during Lake Erie’s frozen winter, will make offshore turbines even less reliable.

The Department of Energy estimates that the cost of wind is least 20 percent higher than the natural gas to which large numbers of power plants have already switched. And, the United States holds the largest reserves of cheap, clean-burning natural gas in the world. In addition, the cost to install a wind turbine in the water is about seven times the cost of a similar installation on land. The claim that wind power renders cheaper electricity is not true and won’t hold up for offshore wind farms.

“Our highest priority should be to protect our natural resource,” says Mack. “Lake Erie has a unique frontage for many Ohio communities, with resorts, parks, marinas, campgrounds, beaches and more. The pure vista of its unbroken horizon attracts tourists from around the world and contributes billions of dollars to our Ohio economy. Having hundreds of 500-foot spinning towers destroying that picture should make any question of offshore wind farms in Lake Erie moot.”

In the mold of America’s Naval commander, Commodore Oliver Hazard Perry, who decisively defeated the larger British fleet in the 1813 Battle of Lake Erie, this newest battle is already uniting a broad range of groups, from labor to lawmakers, intent on defeating this attempt to blight Lake Erie.

LEMTA is urging written comments opposing Icebreaker.



<http://greatlakeswindtruth.org/newsworthy/lake-erie-offshore-wind-economic-cronyism-environmental-boondoggle/>

“The Icebreaker six-turbine wind project, now foreign owned, is not a ‘gusher,’ the ‘Saudi Arabia’ of wind, as termed. It is a massive industrialization of Lake Erie, from which none will recover for a very long time.”

“We respectfully ask the Ohio Power Siting Board to examine the weight of all evidence—not hearsay, propaganda, or wishful thinking. If so, the staff-report caveats for approval (July 3, 2018) will prove insurmountable.”

<http://greatlakeswindtruth.org/cleveland-leedco/letter-from-john-lipaj-to-opsb-overwhelming-negative-consequences-to-icebreaker/>

Other comments by Mr. Lipaj

How does the OPSB make its decision? None of these has been responded to.

By law, the OPSB must find and determine eight criteria including:

America to get a portion of their electricity from offshore wind. (LEEDCo) By Guest Columnist/cleveland.com January 24, 2018 Matt Brakey is president of Brakey Energy. CLEVELAND HEIGHTS, Ohio -- Would you pay \$14 for a gallon for gasoline? Would you pay \$8 for a dozen eggs? Would you pay \$12 for a cup of coffee? Of course you wouldn't. At least not when you can easily competitively source the identical product elsewhere for a small fraction of the price.

However, Cleveland Public Power is on the verge of paying a similarly obscene premium for electricity through the \$126 million LEEDCo Icebreaker wind farm project. My company, Brakey Energy, provides comprehensive energy management services to large users of energy. We exclusively serve our clients' facilities located in the state of Ohio. We pride ourselves on being the foremost expert on Illuminating Company (CEI) and Cleveland Public Power (CPP) rates, and are highly attuned to the prices and trends in power markets. This provides us a unique perspective to evaluate the proposed Icebreaker project.

CPP has agreed to purchase power at a not-to-exceed price of \$181.57 per megawatt-hour (MWh) for the first year the Icebreaker project is online, with a 16-year annual 1 percent price escalator. I recognize most people are not familiar with the going rate for electric power like they may be for gasoline, eggs, and coffee. Therefore, evaluating the competitiveness of the project without a point of comparison can be difficult.

Power is traded on the futures market just like other commodities, so price discovery is straightforward. At the time this was written, a one-year strip of power in northern Ohio could

be purchased for less than \$33 per MWh. In other words, the rate CPP is contracting for is 550 percent higher than prevailing market rates!

But what about 16 years of price certainty with only a 1 percent escalator? Isn't there value in establishing a rate ceiling? Not really.

Power markets are actually in a state of backwardation right now. That's a fancy way of saying the price goes lower - not higher - when you go farther out in time. Power prices a few calendar years out can be purchased for less than \$32 per MWh.

In all fairness, the wholesale prices I am quoting are from conventional generation sources, not renewable wind power. However, the market for renewable wind power has become quite affordable. The premium one needs to pay to contract power from 100 percent wind sources equates to only a few additional dollars per MWh.

Given the clear economic case against the project, what on earth (or water) is CPP thinking? How could CPP be making such an objectively poor decision?

Unfortunately, CPP has a long track record of making poor decisions on behalf of its customers. The utility saddled itself with millions of dollars in stranded costs for a Meigs County coal plant that was never built. CPP then went on to make an investment in the Prairie State coal plant that resulted in it paying tens of millions of dollars in above-market power costs. CPP certainly deserves blame for these poor decisions, but it perhaps could be forgiven. Expectations and reality do not always align in the energy business.

What is unforgivable is that CPP knows how overpriced the Icebreaker power will be. If reality aligns with CPP's project expectations, the result will be further inflated electric bills for its customers.

Opponents say they're worried about the cost of maintaining the turbines in a frozen lake; the industrial lubricants inside each turbine; the plight of birds, bats and fish in the lake; and a future development of more than 1,000 more wind turbines by LEEDCo.'s partner, Norway-based Fred Olsen Renewables. They doubt Icebreaker will create new permanent jobs for Ohioans. And they fear that Cleveland Public Power's agreement to buy a portion of the electricity generated by the turbines will drive up Clevelanders' electric bills.

IMPORTANT LETTER FROM FORMER CHAIRMAN TODD SNITCHLER OPSB, 2014

Application for Certificate of Environmental Compatibility and Public Need LEEDCo-Icebreaker Wind-Powered Electric Generation Facility Case Number 13-2033-EL-BGN

Dear Mr. Nash;

This letter is to inform you that the above referenced application, filed with the Ohio Power Siting Board (Board) on February 7, 2014, and supplemented on February 18, 2014, has been found to not comply with Chapters 4906-01, et seq. of the Ohio Administrative Code (OAC). This means that the Board's Staff has not received sufficient information to begin its review of this application.

<http://greatlakeswindtruth.org/cleveland-leedco/media-release-huge-public-objection-to-icebreaker-continues/>

The following is a listing of insufficiencies found during the Board Staffs' completeness review of this application.

1. 4906-17-05(A)(1)(a), Provide a map of proposed facility. Provide maps illustrating location(s) of the Operations and Maintenance building, and permanent meteorological towers.
2. 4906-17-05(A)(4)(a)(b), Geography and topography mapping. Provide on maps the location(s) of natural gas and hazardous liquid pipelines(s) within the project area and the distance to the closest wind turbine. Provide on maps the transportation routes that will be utilized and location(s) of staging area(s).
3. 4906-17 05(A)(4)(a)(b), Technical Data. Provide detailed information used to determine the suitability of the lakebed for supporting installation and long-term stability of the wind turbines at the proposed turbine locations. See attached UDNK letters for more specific details concerning ice ridge formations.
4. 4906-17-05(A)(5)(b), Hydrology and wind. Provide an analysis oi the prospects of high winds for the project area, including the probability of occurrences and likely consequences of various wind velocities, and describe plans to mitigate any likely adverse consequences.
5. 4906-17-05(B), Layout and construction. Provide traffic and road wear impact studies, specific information on rail and ship infrastructure, specific information on upgrades of Ohio ports, specific

options and details to access the turbines during frozen or semi-frozen conditions, and navigational hazard and mitigation techniques.

6. 4906-17-05(C)(2)(e), Turbine manufacturer's safety standards. Provide a complete copy of the manufacturer's safety manual or similar document,

7. 4906-17-05(D)(2)(b), System studies. Provide the PJM system impact study.

8. 4906-17-08(A)(1), Demographic. The applicant shall provide existing and ten-year projected population estimates for communities within five miles of the proposed project area site(s). The application states that this section is not applicable because the turbines are sited seven miles off shore. However, this section would be applicable to the project because the transmission line and substation are sited inland. Provide demographic data within five miles of the associated transmission line and substation.

9. 4906-17-08(A)(2)(c), 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. See attached ODNR letters for more specific details noise impacts to aquatic species.

10. 4906-17-08(A)(4), 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. See attached ODNR more specific details on structure marking, lighting, and recreational boating community comments.

11. 4906-17-08(A)(5), Blade shear. Describe the potential impact from blade shear at the nearest property 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.

12. 4906-17-08(B)(1)(c)(d)(c). Ecological Impacts. Provided results of wildlife surveys, based on Ohio Department of Natural Resources (ODNR) and U.S. Fish and Wildlife Service (USFWS) protocols, for aquatic species; a summary of impact of the proposed facility on birds, bats, and aquatic species; and a list of major aquatic species.

See attached ODNR and USFWS letters for more specific details on protocols and comments.

13. 4906-17-08(B)(2)(a)(c) and 4906-17-08(B)(3)(a)(c)(d), Ecological Impacts during Construction and Operation. Estimate the impact of construction and operation on aquatic species within the project area boundaries, including the corridor for the 69 kV electric cable. Describe the procedures to be utilized to avoid, minimize, and mitigate both the short- and long-term impacts due to construction and operation. Describe any plans for post-construction monitoring of wildlife impacts. See attached ODNR and USFWS letters for more specific details on these topics.

14. 4906-17-08(C)(1)(b), Land use. Provide the number of residential structures within one thousand feet of the boundary of the proposed facility, and identify all residential structures for which the nearest edge of another structure is within one hundred feet of the boundary of the proposed facility. The map provided does not satisfy this requirement.

Once the materials listed above are received, Staff will conduct a review to determine compliance with Chapters 4906-01, et seq., of the OAC. If the application is found to be in compliance, at that time, a subsequent letter will be sent outlining instructions on serving the completed application, filing from of service, and will list the necessary application fee.

Please be reminded that under Section 4806.04 of the Ohio Revised Code (ORC), the applicant shall not commence to construct any portion of the facility prior to obtaining a certificate from the Board.

If you have any questions regarding the above, you may contact Klaus Lambeck at 614644-8244 or Don Rostofer at (614) 728-3783.

Sincerely,

Todd Snitchler, Chairman

Ohio Power Siting Board

<https://abcbirds.org/article/bird-conservation-groups-to-testify-against-icebreaker-wind-energy-project-in-lake-erie/>



Bird Conservationists To Testify Against “Icebreaker” Wind Energy Project In Lake Erie

*Contact: Black Swamp Bird Observatory: **Kimberly Kaufman**,
Executive Director, 419-898-4070*



One of the highest concentrations of nesting Bald Eagles in the lower 48 states, along with many other bird species, could be at risk from Lake Erie's first proposed offshore wind energy project. Photo by rbrown10/Shutterstock

(Cleveland, Ohio, July 18, 2018) Bird conservation groups will be raising concerns about the impact on birds from Lake Erie's first proposed offshore wind project, "Icebreaker," tomorrow at a public hearing before the Cleveland City Council. Black Swamp Bird Observatory and American Bird Conservancy found numerous **problems with the project's environmental assessment** (EA); the inadequacy of the EA's science and process will be the basis for the joint testimony to be submitted by BSBO's Don Bauman and Mark Shieldcastle.

“We reject the EA's claim that this wind energy facility would have ‘little to no impact’” on birds, said Kimberly Kaufman, Black Swamp Bird Observatory's Executive Director, citing the critical importance of Lake Erie to migratory birds such as the endangered [Kirtland's Warbler](#).

Five recent [advanced radar studies](#) conducted by the U.S. Fish and Wildlife Service (FWS) have recorded vast numbers of migratory birds and bats within 5 to 10 miles of the Great Lakes shorelines, including Lake Erie. Many were flying within the rotor-swept area of wind turbines.

“The six-turbine Icebreaker project poses a larger threat to wildlife than is now indicated in the documents,” said Kaufman. “But the planned expansion of offshore wind energy to over 1,000 turbines will have even more major impacts to birds that breed and migrate across Lake Erie, and that must be addressed.”

The organizations highlighted five major concerns about the EA in their comments, which were submitted to the U.S. Army Corps of Engineers and the Department of Energy:

1. The proposed Icebreaker project site is approximately 7 miles from the Lake Erie shoreline, near Cleveland, Ohio. This is a Globally Important Bird Area (IBA): The Ohio

- waters of the Central Basin of Lake Erie have been registered with BirdLife International and the National Audubon Society as globally significant habitat for birds.
2. The assessment cites outdated studies and ignores new data from birds fitted with radio transmitters, dismissing any threat to the endangered Kirtland's Warbler. These data show that the **species uses the airspace of central Lake Erie** almost exclusively for its fall migration. The site selected for the Icebreaker project turbines could put the entire global population of this rare species at risk just as it's been proposed for delisting from the Endangered Species Act.
 3. To reach the "little to no impact" conclusion, the assessors relied on limited visual surveys conducted only during daytime and in good weather to conclude that migrating birds fly at a height sufficient to avoid the turbines' blades. However, many songbirds migrate at night. The risk they face from turbines is likely greater during conditions of high winds, heavy rain, fog, or low cloud cover, which can affect flight altitude and bring them within the rotor-swept area of the turbines.
 4. The assessment erroneously concludes that migratory birds avoid crossing Lake Erie and instead fly around it. Studies show with certainty that given good conditions, large numbers of migratory birds cross the lake, many of

them making the long journey after stopping at the shoreline to rest and feed. Bird Studies Canada's tracking of radio-tagged individuals clearly shows birds and bats crossing Lake Erie.

5. The EA fails to acknowledge similar existing or planned projects throughout the Great Lakes that could increase the cumulative impacts on birds — an evaluation required by the National Environmental Policy Act. Moreover, project developer LEEDCo has publicly acknowledged their goal to install more than 1,000 turbines in Lake Erie. This will set an important precedent for further Great Lakes wind development. Ontario, for instance, has placed a moratorium on any open water wind facilities in Lake Erie until Icebreaker is decided.

###

[Black Swamp Bird Observatory](#) is a 501(c)(3) not-for-profit whose mission is to inspire the appreciation, enjoyment, and conservation of birds and their habitats through research, education, and outreach.

[American Bird Conservancy](#) is dedicated to conserving birds and their habitats throughout the Americas. With an emphasis on achieving results and working in partnership, we take on the greatest problems facing birds today, innovating and building on rapid advancements in science to halt extinctions, protect habitats, eliminate threats and build capacity for bird conservation.

**Icebreaker
Public Comments Hearing
Lake Erie Foundation Testimony
Ohio Power Siting Commission
7/19/2018**

Thank you for this opportunity to comment on this project with significant impacts to our Great Lake Erie, the 12th largest freshwater lake in the world. This will be the first wind turbine project in any of the Great Lakes.

My name is John Lipaj and I represent the Lake Erie Foundation, a group consisting of approximately 450 members throughout the Lake Erie area.

The Lake Erie Foundation's mission is to create and maintain a healthy Lake Erie as defined by drinkable water, recreational contact and edible fish.

As a Lake Erie water quality advocacy organization, issues such as wind turbines are an important consideration for water quality, aquatic, bird, and economic impacts.

Environmental and economic impacts should be central to any discussion of wind turbines in Lake Erie.

LEF requests the following:

- 1) Icebreaker has been presented to the public as a six turbine wind project. Yet, there is evidence that the purpose of the Icebreaker pilot project, is to demonstrate the feasibility of generating 5000 MGW of electricity on Lake Erie. That would require the equivalent of building an estimated 1,400 to 1,500 wind turbines in Lake Erie.

A March 3, 2017 letter from the US Fish and Wildlife Service to the Executive Director of the Ohio Power Siting Board, states, "According to the Application, this project is proposed as a "demonstration-scale project to help assess the potential success for future larger-scale offshore wind farms in Lake Erie and other Great Lakes." Information gathered from this project will be used to assess the feasibility of developing commercial-scale wind facilities in Lake Erie, or the Great Lakes as a whole."

Yet, the Ohio Power Siting Commission's staff report of July 3, 2018 states the following, "*Applicant has indicated that it has no plans for further expansion.*"

- ***LEF requests a determination in this permitting process, to clarify if Icebreaker is truly a stand-alone project of only six industrial wind turbines, or is Icebreaker a pilot project that would be used to justify future wind projects consisting of thousands of wind turbines on Lake Erie.***
- ***And if it is determined by the OPSB, that this pilot project will be used to justify building future projects, then we are requesting a complete Environmental Impact Statement for the full 1,400 to 1,500 before this project moves any further in the permitting process.***
- **If however the OPSB determines that any of the organizations involved in this application (LEEDCO, Icebreaker or parent company Fred Olsen) are not going to participate in any further wind projects in Lake Erie, then they should be required to sign a legally binding document to that effect.**

- 2) LEEDCO has pursued this project as a nonprofit organization and has received funding accordingly to advance this project. However the “Applicant” that would own and operate this project is Fred Olsen Renewables, a privately held multinational company based in Norway (a sister company of Fred Olsen Energy, the Norwegian oil and gas drilling company).
 - ***LEF requests that a determination be made on the stipulations in the funding that LEEDCO’s received, should any of their assets be sold to a for profit company.***
 - ***Since LEEDCO is a non-profit those funding stipulations should be fully disclosed to the public.***
- 3) Potential conflicts of interest arise anytime non-profit Board Members are in a position to personally benefit by their actions.

Several years ago New York’s Attorney General Andrew Cuomo launched an investigation into alleged corruption between wind energy companies and government officials that included allegations of conflicts of interest and improper influence that surfaced in about a dozen counties.

<https://www.nysba.org/WorkArea/DownloadAsset.aspx?id=1802>

As a result of that investigation, the State of New York passed a law that applies to wind power siting known as the “Code of Conduct for Wind Farm Development”.

<https://ag.ny.gov/press-release/ag-schneiderman-announces-revised-code-conduct-wind-energy-companies-operating-new>

https://ag.ny.gov/pdfs/2016_FINAL_WIND_COC.pdf

- ***To address any concerns about potential conflicts, the LEF asks that a Conflict of Interest Policy, similar to the State of New York’s Wind Conduct policy, be signed by all LEEDCO Board Members, Advisors and Staff. This will reassure the public that all actions taken are in the public’s best interests.***
- 4) LEEDCO’s statements of job creation, need to be weighed against the economic impacts on Lake Erie tourism. Lake Erie tourism spending is \$14 billion a year and supports 124,000 jobs.

A 2016 study by NC State University Center for Environmental and Resources Economic Policy. That study concluded that most people are unwilling to rent vacation homes that have a view of offshore wind turbines. They estimated the economic impact (losses to tourism) at \$31 million over 20 years, putting countless tourism jobs at risk.

<https://news.ncsu.edu/2016/04/taylor-coast-2016/>

- ***LEF requests a similar study to the NC State University Study on the economic impacts to tourism and loss of jobs, for six and 1,400-1,500 industrial wind turbines in Lake Erie. That study should also assess impacts to the boating and charter boat industries.***

- 5) If the six wind turbines are a stand-alone project, are the six turbines production of electricity competitive in the market place?
- ***LEF requests that the cost per kilowatt hour that will be required for the six turbines to be profitable, be provided. And, is profitability dependent on the construction of 1,400 to 1,500 wind turbines?***
- 6) There is currently a halt to the siting and construction of offshore wind turbines in Ontario, Canada.
- ***Has the Ohio Power Siting Board reviewed the economic and environmental information relating to the Ontario moratorium on siting wind turbines in Lake Erie?***
- 7) What funding is being required for long term maintenance, and for removal if the project fails because of ice, other factors or becomes obsolete?
- ***LEF requests that funding for long term maintenance and decommissioning be required to be placed in a trust fund for all turbines that are proposed to be built in Lake Erie.***

In conclusion, LEF requests that another meeting be scheduled to inform the public with regard to the scope of this project, if the Power Siting Board determines that Icebreaker is a pilot project that may lead to application and construction of additional wind turbines on Lake Erie. There are far too many unknowns at this time that need to be answered before going forward.

Evidence that the purpose of Icebreaker is to demonstrate the feasibility of eventually generating 5000 MGW of electricity, which would require the construction of 1,400 to 1,500 turbines on Lake Erie

- “According to the Application, this project is proposed as a "demonstration-scale project to help assess the potential success for future larger-scale offshore wind farms in Lake Erie and other Great Lakes." Information gathered from this project will be used to assess the feasibility of developing commercial-scale wind facilities in Lake Erie, or the Great Lakes as a whole.” -Source: Letter from Dan Everson, Field Supervisor, U.S. Fish and Wildlife Services to Patrick Donlon, Executive Director of the Ohio Power Siting Board; dated March 3, 2017
- **What is your vision for the organization moving forward?**
“Long term, this is about more than this one project. In a couple of decades, we want to implement 5,000 megawatts of wind energy in Lake Erie. Getting this first project built can turn into momentum for more activity.” -Source: quote Dave Karpinski, LEEDCO VP of Operations in article titled: *Q & A: Dave Karpinski, New VP of Operations at Leedco*; FRESHWATER; February 28, 2013
- LEEDCO's demo project is called "Icebreaker" and will consist of six wind turbines seven miles off the North Coast. Karpinski said the plan is projected to create more than 500 jobs and lead to an industry that employs 8,000 people by the year 2030. -Source: *Public hearing on Avon Lake wind turbine project generates some objections*; The Plain Dealer, Dec 22, 2017(Dave Karpinski is LEEDCO's VP of Operations)
- Calling Lake Erie "our greatest fixed asset," Ronn Richard said thousands of lake-based wind turbines would be an environmental asset because they help replace coal-burning, a national security asset and a powerful economic stimulus. -Source: *Cleveland wind project awarded \$40 million DOE grant to develop Lake Wind farm*, The Plain Dealer, May 27, 2016 (Ronn Richard is LEEDCO's Board Chairman)
- Budish recalled sitting in an office listening to Richard talk about building hundreds, even thousands, of turbines in the lake. -Source: *Cleveland wind project awarded \$40 million DOE grant to develop Lake Wind farm*, The Plain Dealer, May 27, 2016 2016 (Armond Budish is the Cuyahoga County Executive) (Ronn Richard is LEEDCO's Board Chairman)
- Icebreaker runs a tidy set of numbers alongside its alternative energy promises. Loftier plans have at least in the past called for 1,250 turbines in Lake Erie by 2030. -Source: *Doing The Wind Farm Dance: LEEDCO Promotes Offshore Turbines in Lake Erie*, Cleveland Scene, Aug 20, 2013
- “after the demonstration project the plans are for 1,600 offshore and onshore wind turbines.” -Source: Lorry Wagner interview in *Wind power Engineering & Development* magazine undated video (Lorry Wagner is LEEDCO's President)

- "We have a vision of a robust industry of multiple projects happening over a 10- to 20-year period," Karpinski said. "We don't know how it will play out, but there's room for thousands of megawatts, for several thousand megawatts of wind (on the lake). We don't know how it's going to play out until we build this first one." Source: *Port hopes to become big player in wind industry*, Crains Cleveland Business, July 08, 2018 (Dave Karpinski is LEEDCO's VP of Operations)
- "This study investigates the economic effects of two scenarios depicting different deployment rates of wind turbines in Lake Erie. Both scenarios feature an initial offshore installation of 20 megawatts by 2012, but differ thereafter, leading to 1,500 MW or 5,000 MW installed by 2030. The larger deployment scenario of 5,000 MW by 2030 generates 8,000 jobs in Ohio, \$7.8 billion in wages and salaries, \$22.6 billion in sales and \$586.5 million in public revenues. -Source: LEEDCO website on June 14, 2018: *The Potential Economic Impacts in Ohio Associated with the Emergence of a Lake Erie Offshore Wind Industry*, Report prepared by Jack Kleinhenz & Assoc, for Nortech and LEEDCO, July 2010,



In reply refer to:
2010-CUY-10925

June 20, 2018

Roak Parker, Environmental Protection Specialist
U.S. Department of Energy
Golden Field Office
15013 Denver West Parkway
Golden, CO 80401

RE: Section 106 Review, Icebreaker Offshore Demonstration Wind Farm Project, Lake Erie, Cleveland, Cuyahoga County, Ohio

Dear Mr. Parker:

This letter is in response to project correspondence received April 11, 12, and 30 as well as June 6, 14, and 18, 2018, regarding the proposed Icebreaker Offshore Demonstration Wind Farm Project in Lake Erie north of Cleveland in Cuyahoga County, Ohio. The comments of the State Historic Preservation Office are made in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated regulations at 36 CFR Part 800.

After receipt of project information in January and February of 2018 and review of same, this office identified several concerns in our letter of March 9, 2018. This letter noted concerns about the submitted information, geophysical survey, identification of historic properties, and consultation. The information provided in April and June of 2018 addressed these concerns as discussed below.

Digital Data

The digital geophysical survey data for the project was requested several times over the course of consultation. An external hard drive containing the digital geophysical survey data was finally received by this office on April 12, 2018. The data provided appears to be largely consistent with the parameters outlined in the *Digital Data* section of the Bureau of Ocean Energy Management's Office of Renewable Energy Programs July 2015 *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* (OREP Guidelines).

Mapping

The large scale maps provided in the previous report submission addressed some of this office's concerns, but omitted key data as outlined in the *Archaeological Resource Charts* section of the

OREP Guidelines. The revised maps received by this office on April 30, 2018, contain the requisite information.

Geophysical Survey Design

The most significant area of concern identified upon review of the report revision received in January 2018 involved adequate survey parameters for identification of historic properties, particularly line spacing. The original report did not specify regular line spacing; this office requested that this be corrected when the report was revised. The report revision received in January 2018 indicated that regular line spacing was 35 meters, which exceeds the minimum line spacing of 30 meters specified in the OREP Guidelines. Upon inquiry, the applicant indicated that this was a typographical error and that regular line spacing was, in fact, 30 meters rather than 35 meters. The report received on April, 30, 2018, corrects this error.

Identification of Historic Properties

After reviewing the information provided in January and February of 2018, this office requested additional information about a cluster of anomalies. These anomalies include C99, C102, C104, C105, C106, C107, and M155. Additional information provided in the archaeological report addendum (*Addendum to Section 106 Geophysical Survey Review for Icebreaker Wind*, dated April 10, 2018) clarifies the nature of this cluster. Based on the additional information, this office agrees that this cluster does not appear to represent a historic property. This office agrees with the archaeological report recommendations that no submerged historic properties appear to be present in the project's direct area of potential effects.

Tribal Consultation

Regarding tribal consultation, we appreciate the provision of additional information regarding efforts to contact tribes. It is clear that the Department of Energy (DOE) has made a significant effort to contact tribes. We appreciate the DOE contacting the four additional tribes this office suggested in addition to the twenty-five tribes previously contacted about this project. Per the DOE, only two of the twenty-nine tribes responded to the DOE. No tribes requested consulting party status or indicated any concerns about the undertaking.

Recommendations

This office continues to recommend that the proposed project will have an indirect, adverse visual effect to the Universal Company Dock & Warehouse (National Register of Historic Properties [NRHP] No. 83001954), the U.S. Coast Guard Cleveland Harbor Station (NRHP No. 76001390), and the Cleveland East and West Pierhead Lights (NRHP Nos. 91001855 and 83001950). The undertaking will alter the integrity of setting of the properties, which contributes to their historic significance, and will introduce visual elements that are out of character with the setting of the historic properties.

In addition, this project will have cumulative effects as per 36 CFR Section 800.5(1), "Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative." As noted by the applicant in project correspondence and publically in the media, the Icebreaker Offshore Demonstration Wind Farm Project has been designed to demonstrate the feasibility of wind energy in Lake Erie

Mr. Roak Parker
June 20, 2018
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so as to promote the development of wind energy in Lake Erie and the Great Lakes. This office recommends that it is reasonably foreseeable that this undertaking will result in cumulative adverse effects from the construction of additional wind turbines in Lake Erie.

If you have any questions, please contact me at dwelling@ohiohistory.org or Kendra Kennedy at kkennedy@ohiohistory.org. You may also reach us at (614) 298-2000.

Thank you for your cooperation.

Sincerely,



Diana Welling, Deputy State Historic Preservation Officer for
Resource Protection and Review

Serial No. 1074439

cc: Beth A. Nagusky, Director of Sustainable Development, Lake Erie Energy Development Corporation, 1938 Euclid Avenue, Suite 200, Cleveland, OH 44115

cc: Stuart Siegfried, Ohio Power Siting Board, 180 East Broad Street, Columbus, OH 43215