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Industrial Wind Turbines pose tremendous risks to Lake Erie, Lake Ontario

New York now making reckless push to industrialize recreational waters

What You Need to Know

- New York State is considering allowing massive industrial wind turbines to be installed within just a few miles of the shorelines of Lake Erie and Lake Ontario.
- The stunning panoramic views, ecology and economies of the lakes are at risk.
- Save Ontario Shores calls on Gov. Cuomo to stop the assault on Upstate New York to benefit New York City's energy needs.

Two New York State documents released in June discuss industrial wind turbines in Lake Erie and Lake Ontario. The *White Paper on Clean Energy Standard Procurement* (White Paper) (June 18, 2020) by the New York State Research and Development Authority (NYSERDA) and the New York State Department of Public Service (DPS) and the *Draft Supplemental Generic Environmental Impact Statement for the Climate Leadership and Community Protection Act*, (SGEIS) (June 11, 2020) by the DPS are responses to the Climate Leadership and Community Protection Act passed in June 2019 that establishes a goal of 70% renewable energy resources by 2030.

“Both papers present cause for concern for all existing lake stakeholders including recreational boating, fishing, tourism, commercial shipping, and wildlife - especially bird and bat seasonal migration,” said SOS Vice President Kate Kremer. “All shoreline communities of the United States and Canada should be concerned and attentive to this reckless push to industrialize these international waters. The stunning panoramic views, ecology and economies of the lakes are at risk.”

The White Paper states that “if feasible, renewables development in the Great Lakes can play a key role in New York’s path to a diversified clean energy economy.” NYSERDA proposes development of a feasibility study to consider wind energy development in Lake Erie and Lake Ontario through a “framework that is sensitive to environmental, maritime, economic, and social issues while considering market barriers and costs.” This feasibility study “would consist of three primary components: stakeholder outreach, analysis and policy options,” and would include interactions “with a wide variety of governmental agencies, industry, non-profit and for-profit organizations, indigenous

nations and other community groups and organizations that may be ... supportive or adversarial to the development.”

The White Paper admits that in the near term, “Great Lakes wind projects are unlikely to be cost-competitive,” but ends with a comment which should be most concerning to Western New Yorkers: “...such projects would interconnect in the region of the state with the greatest proportion of renewable energy development relative to native load...” This is a serious problem, according to New York’s grid operator, because new renewable energy will displace older renewable projects upstate unless transmission upgrades allow the power to be transported downstate. Upstate already has 88% zero emissions electricity generation. These lakes are a long way from the energy needs of New York City and Long Island where 70% of their electricity is generated from fossil fuels.

“Offshore industrial wind turbines will need to be massive in order to be cost competitive because they are incredibly expensive to install,” Kremer said. “Lake Erie and Lake Ontario are less than 60 miles wide making proximity to the shoreline closer to shore than ocean-based turbines. Lakes Erie and Ontario are the smallest and already the most stressed of the five Great Lakes from decades of industrial runoff and other uses along their shores.

“Stirring up legacy pollutants that are in the sediment of the lakes is an environmental disaster in the making. The lakes need restoration, not additional stresses.”

The SGEIS is an environmental document focusing on ecological impacts of the Climate Leadership and Community Protection Act and it discusses the merits of wind turbines in Lake Erie and Lake Ontario in order to meet the Act’s goals. This DPS document has a more aggressive goal than the White Paper, stating, “Great Lakes offshore wind is expected to contribute to the 70 by 30 goal in addition to oceanic offshore wind.”

DPS expects completion of the Icebreaker Wind project in Lake Erie off Cleveland, Ohio, will “renew interest in offshore wind in the Great Lakes ... and therefore warrants additional analysis in this SGEIS.” The Icebreaker project was recently given a permit that includes the condition that turbines be shut down at night for half the year due to danger to migrating bird and bats, highlighting the environmental devastation Great Lakes turbines can have.

The SGEIS report states 66 percent of New York's Lake Erie waters and 17.6 percent of its Lake Ontario waters might be suitable for development. Industrial wind turbines would be sited within 10 miles of the Lake Erie shoreline and within one to two miles of the Lake Ontario shoreline.

"The 70 by 30 goal will require a massive amount of land in scenic agricultural upstate towns whose right to zone for these industrial projects has been diminished," said SOS President Pam Atwater. "Residents are rising up in revolt against these projects. They are bringing forth lawsuits. So now Albany comes up with the idea to industrialize one of New York's most attractive and economically important assets by placing industrial wind turbines a few miles offshore in the lakes. We have been fighting an onshore industrial wind project for many years on lakeshore land and now the State is planning them in the Great Lakes. This is an all-out assault on Western New York from land, sea and air."

Significant impacts include area-use conflicts that would result in the displacement of commercial and recreational vessels from fishing grounds, and/or displacement of fish from fishing grounds. Offshore wind energy may limit certain fishing practices, restrict access to fish, or displace fish from traditional fishing areas. Proximity to the shoreline would create unavoidable visual impacts. There will be habitat impacts and bird and bat collisions.

Although the SGEIS does concentrate on environmental issues, there are two significant technical issues pertinent to Great Lakes wind presented in the paper which must be overcome in order to achieve the goal of contributing to the 70 by 30 goal, according to SOS Energy Committee member Steve Royce, who researched both papers.

First, there are limitations in the size of commercial ships which can safely navigate the locks and waterways in and leading to the Great Lakes. Because of this limitation, only turbines less than 4 megawatts could be transported and installed, unless "development of a new or adapted fleet of construction vessels" is achieved.

"A limit of four megawatts in turbine size may make development in the Great Lakes economically unfeasible. Larger turbines would be needed to justify any project in the Great Lakes," said Royce.

Second is the problem of ice in the Great Lakes. While floating foundations are being developed for use with turbines in the oceans, freshwater ice presents a problem to this technology due to lateral forces imparted by ice and freezing of the substructure.

“Whether wind turbines will be installed in Lake Erie and Lake Ontario as part of the 70 by 30 goal, one thing is for certain: it will happen unless our state leaders can be made to recognize that the ecology of the lakes, and the beauty for which New York was once known are more important than an intermittent, undependable source of a relatively minute amount of electricity which might be achieved from our lakes,” Royce said.

“We are calling on Gov. Cuomo to stop the assault on Upstate New York. Scenic rural areas, including Lake Erie and Lake Ontario, are now threatened by massive industrialization due to his renewable energy goals,” said Atwater.