



Position Statement regarding Offshore Wind Proposals on Lake Huron

Lake Huron Centre for
Coastal Conservation

June 2010

Lake Huron Centre for Coastal Conservation (LHCCC)

Corporate Position related to:

Offshore Wind Power Proposals on Lake Huron

Background

The Lake Huron Centre for Coastal Conservation (LHCCC) recognizes and supports the need for renewable energy in Ontario. We also recognize that the Great Lakes represent one of the nation's greatest natural heritage assets, in terms of water and biodiversity. We encourage the Governments of Canada and Ontario to ensure the people of Ontario, through necessary and sufficient studies, that any offshore wind projects proposed for Lake Huron in no way compromises these assets.

The new Renewable Energy Approval (REA) Process under the *Green Energy Act* that came into effect in the fall of 2009 replaces the Environmental Screening Report (ESR) Environmental Assessment Process formerly in place to guide the approval of renewable energy applications. This new process has substantial implications for municipalities including the removal of requirements for municipal planning approvals under the *Planning Act*.

With the coming into force of the *Green Energy Act* (GEA) in Spring 2009 (as described below), the burden of proof now falls to complainants (including municipalities, agencies and other public interest groups like LHCCC) to provide technical evidence of negative impact.

While no offshore wind projects have been proposed on Lake Huron at the date of this report, the LHCCC Board wishes to have a proactive position in anticipation of potential proposals, as identified by the Ontario Power Authority.

The LHCCC was created as an advocate for the protection of the Lake Huron ecosystem. We recognize the myriad of jurisdictions that involve our freshwater resources and understand that there can be conflicting objectives when dealing with so many government levels, departments and divisions.

Although we recognize the well-intentioned basis for the Green Energy Act, this topic of using the bed of Lake Huron as the platform to generate "clean" wind energy may have unintended consequences on the very environment we are seeking to safeguard.

Assumptions

That, the bed of the lake is Crown Land and is therefore a public resource shared by the people of Ontario;

That the people of Ontario expect proper stewardship of public natural heritage assets, including Great Lakes beaches and lakebed;

That, the bed of the lake in the nearshore and offshore consists of numerous lag deposits that provide habitat for fish and other aquatic species;

That, we currently lack detailed scientific information on the form and function of the lake bed in this area to inform the decision making process;

That, offshore impacts that are documented are limited and based on ocean-based studies that differ in substantive ways to the ecology of Lake Huron;

That, we lack detailed information on the environmental impacts of construction, transmission, maintenance, and de-commissioning;

That, studies need to demonstrate that projects will not detrimentally impact wildlife, including, but not limited to, birds and bats.

Issues

Fisheries

Sport and commercial fishing in the Great Lakes provide recreation, jobs (to fishermen, marinas, food processors, etc) and help maintain appropriate population levels of many fish species. Offshore wind project activities that hinder this industry could result in negative consequences to all interest groups involved as well as the local and regional economies.

Birds

Many avian species use both the waters and airspace in the Great Lakes for migration, feeding, resting and wintering. Large-scale offshore wind development may alter these behavioral patterns resulting in displacement or mortality. More study is needed in this area to document impacts of offshore wind on avian species.

Bats

Little is known about bat foraging or migration over open water or the use of islands and points by bats to cross the Great Lakes. Nor is it known if some bats follow the Great Lakes shoreline during their spring and fall migration or drift over open water as do nocturnal migrating land birds. It is known that bats are highly susceptible to mortality from wind turbines, particularly migrating bats. These concerns illuminate the need for study on this topic regarding Great Lakes offshore wind development.

Lake Bed

The lake bed provides habitat to a range of wildlife species that contribute to the critical maintenance of the Great Lakes ecosystem. Long-term disruption to sensitive lake floor habitat may have negative implications on the viability of these natural populations.

Shoreline Habitats

While the vast majority of work will occur in the lake habitat, there will be activities involving the lake shoreline, such as connection of cables to substations, on and off-loading of material, and increased ship

activity. This has the potential of impacting the shoreline by disrupting drainage patterns, infringing upon wetlands, dune systems and associated habitat, and causing potential erosion issues.

Water Quality

The potential for impairments to water quality, both during and post-construction, needs to be carefully evaluated. Possible leaks of lubricant fluids and other potential contaminants could impair the safety of water for drinking and swimming.

Boating

Recreational and commercial, traffic occurs throughout the Great Lakes. There are existing shipping and ferry lanes used by government agencies as well as the private sector that could be impacted by offshore wind development in some manner.

Visual (Scenic), Historic and Cultural Resources

The concept of what should be considered “visually pleasing” varies among people. Generally, it is preferable to minimize the visual impact of wind turbines when viewed from the shoreline. On-shore structures or other elements may also impact the overall visual appearance of a particular site. Cultural resources related to First Nations need to be identified through archeological investigation and avoided.

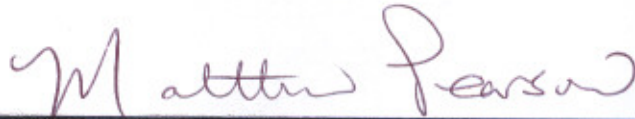
Position

Therefore, the Board of Directors of the Lake Huron Centre for Coastal Conservation take the position that:

- A. Prior notice and consultation should occur on a lake wide basis for all off shore proposals on Lake Huron. It is crucial that meaningful public participation be provided. In this regard, First Nation consultation is considered vital;
- B. The Province of Ontario and Government of Canada fund independent research in the areas of coastal processes, aquatic ecology, coastal engineering, beach and shore ecology to determine the potential impacts of offshore wind mills on the offshore, nearshore and onshore ecosystems, system communities and species, coastal geomorphology and;
- C. Proposed offshore wind projects should be reviewed with comprehensive analyses. Engineering and ecological consultants need to undertake primary research (modeling, measuring and counting) to determine whether the proposed undertakings will result in negative impacts on water quality (including re-suspension of contaminated sediments) and the physical and biological features and processes associated with any offshore proposal. In addition, the promotion of invasive species colonization from lakebed alteration should be investigated;
- D. The lead federal agencies should initiate, as early in the planning process as possible for any proposed wind project on one of the Lakes, intergovernmental consultation with all government agencies who might be directly and substantially affected by an offshore wind project – or involved in any capacity – to ensure that issues and concerns at all phases of the project, including decommissioning, are identified and adequately addressed.
- E. If deemed to be feasible that it is possible to construct these structures without significant impacts, it is also necessary to identify impacts and measures related to:
 1. Ongoing operation, including, but not limited to:

- i. Concern over possible leaks of lubricant fluids;
 - ii. Methods of winter repairs under ice conditions;
 - iii. Aesthetic issues related to lights and fog horns, which have the potential to cause visual, noise and light pollution;
 - iv. Concern over vibrations and electromagnetic fields emitted from cables transferring power from off-shore sites, and their affect on aquatic communities and any people who live nearby;
2. Potential damage from wind, waves, ice, and lightning, and
 3. Eventual dismantling and end of life removal. Decommissioning and removal of turbine components including blades, nacelle, tower, and containerized transformer, is anticipated to be largely a reversal of the installation process and should be subject to the same constraints. Operational wastes associated with routine maintenance, repair, upgrades, and/or decommissioning must be properly handled, stored, transported, and disposed of at a licensed facility that complies with applicable regulations.

This is the position of the Corporation of the Lake Huron Centre for Coastal Conservation, dated June __, 2010, signed by:



Matthew Pearson, Chair
Lake Huron Centre for Coastal Conservation