



March 6, 2023

To: Nova Scotia Environmental and Climate Change, Environmental Assessment Branch

The following submission in response to Mersey River Wind Farm EARD is on behalf of the Ecology Action Centre.

The Ecology Action Centre is an environmental charity based in Mi'kma'ki/Nova Scotia. We take a leadership role on critical environmental issues from biodiversity protection to climate change to environmental justice. Grounded in deep environmental change work and fueled by love and grief, EAC takes a 50-year perspective on what is needed to build towards a time of thriving and flourishing. We work to equip human and ecological communities for resilience and build a world where ecosystems and communities are not just sustained but restored.

The Ecology Action Centre supports increased wind power and other genuinely renewable electricity sources (not biomass) to support the quick transition to a low carbon future and avoid the most catastrophic impacts of climate change. However, the EAC's support for wind power generation is conditional on where wind farms are being placed and how decisions are being made. Despite the numerous benefits of wind power generation, if wind developments are built in the wrong places, they can perpetuate ecological degradation, environmental racism, and harmful industrial practices. Wind farms should be located at sites that minimize the impact on sensitive ecosystems and cultural landscapes.

For this reason, we support wind generation under the following conditions: a comprehensive Crown land use planning process is conducted, biodiversity protection is prioritized and accelerated, Mi'kmaw sovereignty and rights are respected, communities are given a say in where wind developments are sited, an analysis of community benefits is presented and afforded to communities, and, models of community owned utilities that increase energy democracy are given priority over corporately-owned, for-profit wind development proposals.

General comments

30 Day Comment Period

Due to the short time frame provided for the public and civil society groups (including the EAC) to provide comments on the Environmental Assessment Registration Document (30 days), the EAC staff were only able to review and provide comment on a limited number of aspects of the proposed project. The Ecology Action Centre believes that the 30-day comment period is not enough time to provide a full response. Many of those who are interested in reviewing the documents and submitting comments do so on a volunteer basis and must dedicate a significant amount of time outside of their work and home life to write their comments. For this particular package of environmental assessment documents, there are 1,068 pages of text between six documents. **Please extend future public comment periods to at least 60 days so that organizations, groups and members of the public have a sufficient opportunity to review the relevant documents and form comments in response.** This would also bring the environmental assessment public consultation period in line with another Nova Scotia Environment and Climate Change (NSECC) comment period: NSECC seeks public input on proposed Wilderness Area designation through a public consultation process that is open for 60 days.

Crown Land Use Planning

The EAC has repeatedly recommended to government that a holistic approach to Crown land use planning should be undertaken to consider all the competing demands for Crown land (most of which are listed in the updated purpose of the *Crown Lands Act*). We reiterate this advice again here. The potential to overwhelm our limited Crown land base with one-off projects that are considered in isolation from one another and from other responsibilities including wildlife habitat protection and connectivity is very real and very concerning. **We recommend that the Province conduct Crown land use planning that considers all the values and purposes for which The Provinces is committed to stewarding public (Crown) land.** We note that in the case of the Mersey River Wind Farm project, perhaps due to lack of Crown land use planning, the Crown land value and purpose of providing for biodiversity conservation has not been appropriately considered by the proponent or planned for by The Province.

Additionally, a planning approach and document created by NSDNRR, [Guidelines for Biodiversity-Rich Landscapes under the Western Crown Lands Conceptual Plan](#), was not used by the proponent, and was perhaps not identified in conversations with DNRR as applicable to the area. This guidance should be followed, and would likely affect the design, monitoring, and conditions of the project.

Specific topics in the EARD

Regulatory Framework (page 4-5 of the report)

The proponent states that NRCan has been notified of the “final design, location, and height of turbines.” If Nova Scotia’s EA process is legitimate, the final design, location, and height of turbines should not be finalized yet – it may be altered based on comments from government departments, the Mi’kmaq of Nova Scotia, and/or the public. If approval of this project with no modifications is not a foregone conclusion, the proponent should not be notifying any level of government of the final design of the project until after the EA review process is complete.

Page 5 of the report states:

“The Province of Nova Scotia has identified new areas to become wilderness areas, protected areas, or nature reserves. Much of the land next to the Mersey River has been identified as future parkland.”

To be more accurate, the Province of Nova Scotia has identified and consulted on Crown land adjacent to the proposed project to be designated as Nature Reserve, or Provincial Park. Parkland is not a term used by the Province, and there are no new Wilderness Areas proposed close to the project. Lands identified as candidate Nature Reserve (not “future Nature Reserve area”) are under moratorium that precludes certain types of activities, including forestry and road building.

Page 5 also states:

“The configuration of the proposed protected areas, registered and potential archaeological sites, and stands of old growth forest precludes alternative site access.”

There are likely alternative layouts of the site that would avoid having project infrastructure created so close to candidate protected areas. **The proponent should describe and map alternative layouts of the project that provide a greater buffer distance from candidate protected areas.**

Additionally, we would like to raise the fact that the study area of the wind farm is within an area specified as a Biodiversity-Rich Landscape, within the *Crown Land Management: A conceptual plan for Western Nova Scotia, 2015*. The proposed wind farm sits within land designated as the Lower Mersey Biodiversity-Rich Landscape (Area 11), in the document [Guidelines for Biodiversity-Rich Landscapes under the Western Crown Lands Conceptual Plan](#). The conceptual plan states that “A biodiversity rich landscape is characterized by a breadth of species and ecosystems, including but not limited to species-at-risk. The dominant value is conservation. Although resource development can be undertaken in these areas, protection of

biodiversity and habitats, will guide management and resource extraction.” The EARD does not list this document as an applicable policy, but it is. **The proponent should examine the document, consult with NSDNRR staff, and provide analysis as to how their proposed project interacts with this policy and staff recommendations.**

Operation and Maintenance (page 13 of the report)

The report states that roads will be maintained for access purposes, including potentially through plowing, sanding, or salting. Sanding and salting can negatively impact ecosystems next to the roads, and areas downstream from roads maintained in this way. **The proponent should work with NSDNRR to commit to road clearing techniques that avoid sanding and salting.**

A vegetation management plan is briefly mentioned. **This plan should not include vegetation management through the use of herbicides.**

Spatial boundaries (page 16 of the report)

The use of property boundaries to form the extent of the Study Area is not suitable. The Assessment Area (which is the Project Area physical footprint of project infrastructure, plus 100m around turbine pads and 25m on each side of road) sometimes overlaps with or extends beyond the Study Area, which doesn't make sense. The Study Area should be defined differently, providing a sufficient buffer around all wind turbines and associated infrastructure. **The Study Area should respond to the extent for which impacts from threats (e.g., noise, dust) are documented to negatively impact each component of the VCs (e.g., fish habitat, moose).**

Identification of Valued Components (page 16)

Given that this project is especially close to multiple candidate protected areas (and an existing protected areas), AND that the project is within a Biodiversity-rich Landscape, **the proponent should have identified a VC of Protected Areas for analysis.**

Government and public engagement (pages 24-25)

The proponent does not describe meeting with NSECC Protected Areas and Ecosystems Branch, nor do they describe meeting with wetlands staff at NSECC. It is vital that the proponent meet with these staff in order to properly assess impacts to the VCs. These meetings could identify meaning modifications to the projects, and ways to attempt to offset residual impacts. We also argue that a VC for Protected Areas should have been evaluated.

Nomenclature (page 32)

“Kejimkujik National Park” is officially named Kejimkujik National Park and National Historic Site.

Community Liaison Committee and Community Benefits (pages 35-36)

The proponent suggests several community benefits they may provide. **The proponent should commit to one or more of the “direct community benefits” they proposed (e.g., endowment fund, NGO energy rate). The benefits committed to should be included in the Terms and Conditions of the EA Approval, if granted. NSECC should include monitoring of whether the community benefits are being delivered to the community in a timely manner.**

Air Quality (pages 42 – 46)

Limiting the LAA for assessment of potential air quality impacts to just the Project Area (i.e., just very close to the turbines and roads) seems inappropriately small. The proponent identifies at least one phase of the project – construction – where dust and exhaust emissions will be high. Dust and exhaust impacts may extend deeper into the surrounding environment than the arbitrary buffer distances around turbines and road. **The proponent should select a LAA that is based on evidence of how far into the surrounding environment dust and exhaust are shown to have impacts.**

The proponent only discusses some of the potential impacts of dust on humans. **The proponent needs to discuss the potential impact on other species and parts of the environment.** Without examining these potential impacts the conclusion that the impacts are “negligible” can not be substantiated.

Waterbodies (pages 70 – 71)

Again, the selection of Assessment Area as just the project infrastructure area plus buffers is not suitable. This section concludes that there are no waterbodies within the Assessment Area, thereby missing potential impacts to waterbodies that are in close proximity to multiple turbines and roads that are part of the project. It does seem like the Assessment Area itself overlaps with at least one waterbody at Little Bon Mature Lake. **Potential impact to all waterbodies that are within the project area (e.g., all waterbodies listed as within the Study Area, and touching Study Area boundaries) should be assessed.**

Wetlands (pages 92 – 108)

The proponent states that 3 WSSs are located in the Study Area. **These should be included in Drawing 7.17.**

The proponent states that in the initial functional assessments of 8 wetlands “none of the wetlands were determined to be WSS” and that “The results of the desktop and

field assessments show no at-risk lichen or plant species within field-delineated wetlands within the Assessment Area. Furthermore, the results of the wetland field assessments were also cross referenced with breeding bird survey (BBS) results, specifically for avian SAR with wetland habitat requirements. Again, these results show no at-risk bird species within field delineated wetlands within the Assessment Area.” However, there have been confirmed sightings of different rare species including several rare lichen species in the area. **The proponent must confirm the existence or absence of any species at risk at each of the wetlands before alterations take place. Please provide more detailed information about how this process will be undertaken.**

In the discussion about the importance of hydrology of a wetland, the proponent notes that “project infrastructure within or near a wetland can result in changes in the timing and quantity of flow, potentially impacting species composition, water treatment capabilities, and nutrient export (Mitsch & Gosselink, 2001). Further, disruption to the hydrology of one area may hinder the hydrological connectivity to other areas, thus resulting in impacts being felt in neighbouring wet areas as well.” In addition, the proponent also writes that all 8 wetlands in the functional assessment were determined to be at a higher wetland risk which is “likely due to many of the wetlands being previously impacted by anthropogenic disturbance (i.e., road building, forestry activities, etc.) both directly and within the greater catchment area, resulting in a potential lack of intrinsic resistance and resilience to future stressors.” Therefore, it is clear that the proponent understands the cumulative direct and indirect consequences that anthropogenic disturbance can have on wetlands. However, subsequently, during the discussion of the indirect impacts that will occur to wetlands due to the activities of this project, the proponent does not acknowledge the cumulative impacts on wetland hydrology including timing and quantity of flow and how the disruption of the hydrogeology of one area may hinder hydrological connectivity to other areas. **The proponent should provide a detailed discussion about the cumulative direct and indirect impacts the project activities and infrastructure within or near the wetlands will have on the wetlands.**

The proponent has a limited discussion around the indirect impacts that will occur to the wetlands in the project area. **A more detailed overviews of these impacts should be provided. The proponent should also include the answers to the following questions:**

- Will there be setbacks or buffers from the wetlands that will be observed by proponent during the entirety of the lifecycle of the project?
- What type of, and how much, vegetation clearing will occur in and around the wetlands?
- How will the wetlands be clearly marked to avoid interference with wetland habitat?
- What are the speed limits that will be enforced to minimize dust generation? Please use studies and data to justify the speed limit chosen.

Furthermore, the proponent also notes in the listed mitigation measures on wetland disturbance that there are plans to hold pre-construction site meetings to educate

staff on the sensitivity of wetlands. This is an excellent step. These meetings should include discussions on the importance of wetlands in terms of the ecosystem services that wetlands provide to both humans and the planet, in addition to emphasizing the vital role wetlands play in tackling the climate crisis and biodiversity crisis.

Terrestrial Environment (pages 108 - 115)

The proponent sets out several applicable laws and regulations pertaining to terrestrial habitat. The *Biodiversity Act* is incorrectly listed in this section. The Regulatory Context section is also in error by omitting the "Guidelines for Biodiversity-Rich Landscapes under the Western Crown Lands Conceptual Plan (July 2015)." This policy applies to the area in question, regarding terrestrial habitat.

Parks and Protected Areas (section missing)

The project should have treated Protected Areas (including pending and designated) as a VC. The proponent should have examined potential impacts on pending Nature Reserves, the pending Provincial Park, and the Conservation Lands owned by the Nature Conservancy of Canada. All of these have the potential to be impacted by the project, including the section of the Lower Mersey Nature Reserve (Pending) where a project road passes through a section of the pending Nature Reserve.

The proponent provides notes and dates regarding meetings with government departments, but does not list meeting with the Protected Areas and Ecosystems Branch of NSECC. They should have met with this group given how many pending and designated provincial protected areas are adjacent or overlap with the Project. Also, the proponent should have met with the Nature Conservancy of Canada, owners of the Long Lake Bog Conservation Lands. Discussions with DNRR's Provincial Parks group should also take place. **The proponent should meet with NSECCC Protected Areas and Ecosystems Branch (and wetland staff), Nature Conservancy of Canada, and NSDNRR's provincial park staff regarding the proposed project.**

Biodiversity (section missing)

In addition to the problematic omission of examining the [Guidelines for Biodiversity-Rich Landscapes under the Western Crown Lands Conceptual Plan](#) and the lack of meetings with DNRR staff about this policy, the proponent has also failed to meet with a local, expert group in biodiversity in the area: the Mersey Tobeatic Research Institute (MTRI). **The proponent should meet with MTRI before further advancing the project.**

Forests

The proponent is quick to dismiss the quality of the forest in the Study Areas, based on historic industrial operations, field notes, and outdated aerial imagery (2007). Even a desktop approach using the current FRI (Forest Inventory) shows several stands over

20m in average height, composed primarily of later-successional tree species (White Pine, Red Spruce, and Eastern Hemlock). **The proponent needs to recognize that several stands in the Study Area should be safeguarded due to their maturity and therefore value to forest conservation, including as potential sites that could currently (or in future) contribute the NS Old-Growth Forest Policy.** See also the [Guidelines for Biodiversity-Rich Landscapes under the Western Crown Lands Conceptual Plan](#), which calls for the conservation of old-growth forests in this area.

Old-growth forests

The proponent states that they only identified (desktop analysis) one stand that met the criteria for old-growth forest, and that this stand was verified in the field. **There are several old-growth forest stands in the Study Area that should be examined, including ones that seem to overlap with project infrastructure or the “Assessment Area” boundary. The proponent should also examine stands near turbines 33, 13, 12, and 2 for the potential for the project to impact these stands.**

Roads

The proponent states that because the project will use pre-existing roads (37.6 km) more than new roads (8.4 km) the impacts to “undisturbed and unfragmented habitat will be low,” and that “habitat functionality will remain intact relative to pre-construction conditions.” This is unsubstantiated – there could still be impacts from these new roads. The proponent needs to provide evidence for this claim. Additionally, this claim does not take into account the impacts of widening existing roads (plus ditches and other road infrastructure), which the proponents states may be needed. **The proponent should examine the literature on the impacts of roads on wildlife. See also the [Guidelines for Biodiversity-Rich Landscapes under the Western Crown Lands Conceptual Plan](#),** which calls for reducing road impacts in this area.

Terrestrial Flora (pages 116 – 125)

The proponents did not identify a number of threats that the project poses to plants and lichens. **The proponent should examine potential impacts from dust (especially on lichens), increases in salt (from road salting), and edge effects (from creating new roads or expanding existing roads). A monitoring program for the many rare lichens in the Study Areas seems merited.**

Terrestrial Fauna (pages 125 – 191)

The Regulatory Context should also include the Migratory Birds Convention Act.

Moose: The proponent describes using the Mainland Moose Recovery Plan to inform their Habitat Suitability Modeling. **The proponent should state whether the project Study Area overlaps with the Core Habitat and/or have high combined HSI Score with Road Buffer Score (such as combined scores of 7, 8, or 9).**

The project will contribute to direct threats to moose, as it is in an area of high-quality habitat. Primary impacts to moose come from habitat loss and habitat fragmentation, including from the construction of new roads, which this project will do. The proponent's minimizing language regarding the impacts of their new roads attempts to diminish that the project is in fact contributing to one of the main ways in which the endangered Mainland Moose is declining, AND the project will reduce habitat to which moose may be restored. **The proponent should not attempt to diminish the fact the project will degrade and eliminate important moose habitat, and degrade or eliminate secluded calving sites, such as along the lakes in the Study Area.**

Regarding *P. tenuis* spread to moose via White-tailed Deer: contrary to what the proponent said, new roads do increase access for deer into moose habitat, thereby increasing their potential exposure to *P. tenuis*. New roads also increase access for poachers, another primary threat to moose. The proponent erroneously downplays the effects of new roads in their report.

Cumulative effects (pages 251 – 254)

This section does not really evaluate cumulative effects, at least for the VCs Wetlands, Terrestrial Habitat, Terrestrial Flora, and Terrestrial Fauna. All of these VCs are being negatively impacted by human activities in the area, including by the Development type Forestry. Loss of nearby wetlands, and habitat for wildlife (including SOCI), does mean that loss of wetlands and wildlife habitat causes by the project contributes to, and is affected by, wetland and wildlife habitat loss in the area. It is an erroneous conclusion to state that "adverse residual effects are not anticipated to be significant." The analysis does not support this.