



PROPOSED WESTCHESTER WIND PROJECT OPEN HOUSE MATERIALS

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<https://www.naturalforces.ca/westchester-wind-project.html>



Project Overview

The proposed Westchester Wind Project is located in Mi'kma'ki, the ancestral territory of the Mi'kmaq. Natural Forces acknowledges that working on these lands is a privilege that comes with a great deal of responsibility. The proposed Project is being developed by Natural Forces and Wskijinu'k Mtmo'taquuow Agency (the Proponents). The proposed Project could have an approximate total capacity of approximately 50MW and up to 12 wind turbine generators.

The proposed turbines have an individual capacity of 4.2-5.5 MW with tower heights of approximately 120 m and blade lengths of approximately 75 m. The Project is proposed on privately-owned lands along highway 104 in Cumberland County near Westchester Mountain, approximately 25 km southeast of Oxford. The site lands are a mixture of forested and blueberry fields with various existing access roads. This location was chosen due to its elevation, optimal windspeeds, distance from residences, and minimal environmental constraints.

The proposed Project still requires all environmental permits and land use permits. The Proponent will also continue stakeholder consultation and Rightsholder engagement throughout all phases of the proposed Project.

Project Owners

Natural Forces

Natural Forces is a private independent power producer that delivers renewable energy projects in partnership with local communities across Canada, the United States, and Ireland. Established in 2001 in Halifax, Nova Scotia, Natural Forces remains a small company with big values and big ambition.

Natural Forces develops, constructs, owns, and operates wind, solar, hydro, and storage projects with Indigenous communities, universities, municipalities, and local community funds. Partnering with local communities for these projects not only generates clean and renewable electricity but delivers local economic prosperity and raises awareness of the challenges of climate change.

Wskijnu'k Mtmo'taquuow Agency

The Wskijinu'k Mtmo'taquuow Agency Ltd (the Agency) is a limited partnership (LP) created by the 13 Mi'kmaw bands in Nova Scotia. Recognizing the need to build capacity and work with experts to participate in opportunities available in Mi'kma'ki, the traditional and current territory of the Mi'kmaq, the Agency was formed to develop partnerships with industry leaders.

Project Benefits

- Generate enough electricity to power up to 20,000 Nova Scotian homes.
- Provide up to \$10.1 million in tax revenue to Cumberland County over the life of Project.
- Create local employment and contracting opportunities during the development, construction, operation, and decommissioning phases of the Project.
- Increase revenue to local businesses due to economic spin-off from Project activities.

- Produce emission-free electricity that will displace energy generated from fossil fuels, thereby reducing greenhouse gas emissions.
- Assist the province of Nova Scotia in meeting their renewable energy target to achieve 80% renewable energy on the electricity grid by 2030.
- Stabilize energy costs for Nova Scotia Power customers by increasing electricity generation sources with fixed cost contracts.

Environmental Studies

The proposed Westchester Wind Project requires a Provincial Environmental Assessment (EA). An EA was registered with the Province on February 23, 2022. An addendum to the initial registration document providing answers to the Minister's request for additional information was registered with the Province on January 6, 2023.

These studies are helping shape the Project to ensure it is developed responsibly and to mitigate environmental and socio-cultural impacts.

Topics of Study

- Wetlands and watercourses
- Breeding birds
- Migratory birds
- Common nighthawks
- Bats
- Archaeology
- Vegetation
- Wildlife and habitat
- Wind resource
- Sound
- Visual
- Geology

Sounds Levels

The most significant factor when limiting sound impacts to nearby residences is the way wind turbines are sited. As such, the proposed wind turbines have been located more than 1 km from any residence, which is further than the separation distance necessary to limit sound levels from turbine operation. Based on this siting, Natural Forces assessed the impact of sound levels from the proposed Westchester Wind Project on nearby homes. This assessment uses industry best practices to model how the sound created by the wind turbines will travel over the landscape.

Based on feedback received from stakeholders, Natural Forces engaged a third-party consultant to review the methodology used to carry out this modeling and to validate the results. The company Aercoustics Engineering concluded that the methodology used by Natural Forces is appropriate and provides conservative results, likely overestimating the expected sound levels.

Results of the modeling show that sound levels potentially experienced by nearby receptors during the Project operation would be well below the provincial limit of 40 decibels. Under certain climatic conditions for short periods of time, the model estimates a maximum sound level at a residence of 32.3 decibels from the wind turbines, which is comparable to leaves rustling in a tree. The attached map visually shows the results of the sound modeling for all 12 wind turbines.

Project Timeline

Work Completed to Date

- Site identification
- Installation of wind measurement instrumentation
- Initial engagement with Mi'kmaq bands
- Initial public and stakeholder consultation
- First interconnection study with Nova Scotia Power
- Environmental studies – Year 1
- Submission of Environmental Assessment
- Application to NS Rate Base Procurement Program
- Submitted the addendum to the Environmental Impact Assessment

Ongoing Work

- Private land security
- Stakeholder consultation and Mi'kmaq engagement
- Mi'kmaq ecological knowledge study
- Application for municipal development agreement
- Application for easement on provincial Crown Lands
- Advanced interconnection studies with Nova Scotia Power
- Wind measurement campaign

Future Work

2023

- Environmental Assessment approval
- Seek opportunities for power contracts
- Negotiation of power contract
- Pre-construction activities
- Earliest start of construction activities

2024

- Turbine micro-siting
- Turbine procurement
- Continue construction

2025+

- Project commissioning
- Site reclamation from construction
- Operation of turbines
- Post-construction environmental studies
- Site maintenance and upkeep
- Decommissioning

Proposed Westchester Wind Project








Proposed Project Layout

Wentworth Collingwood Road





Westchester Road

104

Proposed Project Infrastructure

-  Preliminary Turbine Locations
-  Proposed Substation
-  Transmission Interconnection
-  New Collector Lines
-  Existing Access Roads
-  New Access Roads
-  Residences and Buildings

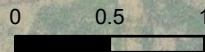
Existing Infrastructure

-  Existing 138 kV NSPI Transmission Line
-  1km Buffer from Residences
-  Private Lands
-  Crown Land



Scale: 1:40,000

Kilometers



1. Turbine markers are not to scale.
2. This layout is subject to change pending permitting approvals, further wind resource analysis, and other factors.

Proposed Westchester Wind Project

Sound Level Map

Wentworth Collingwood Road

Westchester Road

104

● Preliminary Turbine Locations

● Residences and Buildings

Sound Assessment Contours

— 35 dB(A)

— 40 dB(A) [regulated max.]

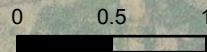
— 45 dB(A)

— 50 dB(A)



Scale: 1:40,000

Kilometers



1. The Guide to Preparing an EIA Registration Document for Wind Power Projects in Nova Scotia requires that wind farm design and siting does not cause sound levels to exceed 40 dB(A) at the exterior of receptors.

2. Turbine markers are not to scale.

3. This layout is subject to change pending permitting approvals, further wind resource analysis, and other factors.