

PROPOSED BENJAMINS MILL WIND PROJECT OPEN HOUSE MATERIALS

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Contact

info@naturalforces.ca 902-483-9592 www.naturalforces.ca/benjamins-mill-wind-project





Project Overview

The proposed Benjamins Mill Wind Project is located in Mi'kma'ki, the ancestral and current 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'taqnuow Agency (the Proponents), and will be built in several phases. As such, the proposed Project could have an approximate total capacity of up to 150 MW, representing up to 28 turbines.

The proposed Project is approximately 13 km southwest of Windsor and over 1.5 km from the communities surrounding Falls Lake. Landowners use the proposed Project lands for active forestry operations. Existing infrastructure, such as access roads and transmission lines, will be used to minimize the footprint of the proposed Project.

As of October 2022, the first phase of the proposed Project has been awarded a contract to sell the generated electricity to Nova Scotia Power through the Nova Scotia Rate Base Procurement program. The first phase of the proposed Project consists of up to 8 wind turbines or approximately 33.6 MW of installed capacity.

The proposed Project still requires all environmental and land use permits and the Proponents will continue stakeholder consultation and Rightsholder engagement throughout all phases of the proposed Project, including prior to the start of construction. Construction is expected to begin in the spring of 2023. Opportunities for additional power contracts are being explored with Nova Scotia Power, other smaller utilities in the province, and large corporations for the remaining proposed wind turbines.

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'taqnuow Agency

The Wskijinu'k Mtmo'taqnuow Agency Ltd (the Agency) is a corporate entity 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 13,000 homes for the first phase (8 wind turbines), and 58,000 homes for the entire 150 MW Project.
- Provide up to \$7 million in tax revenue to West Hants Regional Municipality over the life of the first phase (8 wind turbines), and up to \$30 million over the life of the entire 150 MW 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 spinoff 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 Benjamins Mill Wind Project requires a Provincial Environmental Impact Assessment (EIA). The initial EIA was registered with the Province in January 2022. Additional studies are currently being conducted as part of the Province's request for additional information.

These studies are helping shape the Project to ensure it is developed responsibly and to mitigate environmental and socio-cultural impacts. The additional information will be submitted to the province in December 2022 and will be available on the Project website.

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 Benjamins Mill 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 modelling and to validate the

October 2022

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 modelling 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, which is comparable to leaves rustling in a tree.

The attached map visually shows the results of the sound modelling for all 28 wind turbines.

Project Timeline

Work Completed to Date

- Site identification
- Private land secured
- Installation of wind measurement instrumentation
- Initial engagement with Mi'kmaw 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
- Awarded a power contract for Phase 1

Ongoing Work

- Stakeholder consultation and Mi'kmaq engagement
- Environmental studies Year 2
- Submission of additional studies for environmental assessment
- Mi'kmaq ecological knowledge study
- Application for municipal development agreement
- Application for lease on provincial Crown Lands
- Advanced interconnection studies with Nova Scotia Power
- Wind measurement campaign
- Seeking additional opportunities for power contracts

Future Work

2023

- Environmental assessment approval
- Turbine micro-siting
- Pre-construction activities
- Turbine procurement
- Beginning of construction

2024

- Continue construction
- Project commissioning
- Site reclamation from construction

2025+

- Operation of turbines
- Post-construction environmental studies
- Monitoring and site management
- Decommissioning and site reclamation

Benjamins Mill Wind Project

Proposed 28 Turbine Layout

MinesRoad

Windsor Forks

0

Highway 14

2

Falls Lake

0

0

Main access from New Russell Road

Proposed Project Infrastructure

Phase I Turbine Locations • Future Turbine Locations Substation Transmission Interconnection New Collector Lines New Access Roads Existing Access Road **Existing Infrastructure** Residences and Buildings 0 1 km Buffer from Residences Existing 138 kV NSPI Transmission Line Existing 69 kV NSPI Transmission Line Secured Private Lands Provincial Crown Lands

Scale: 1:50,000 Kilometers

0 0.5

N

1. Turbine markers are not to scale.

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2. Phase I turbines have been awarded contract by NSPI.

Future turbines are anticipated to be awarded contract through various opportunities.
This layout is subject to change pending permitting approvals, further wind resource analysis, and other factors.

Benjamins Mill Wind Project

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Proposed 28 Turbine Sound Level Map

MinesRoad

Windsor Forks

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Falls Lake

Highway 14

Main access from New Russell Road

 Phase I Turbine Locations
Future Turbine Locations
Proposed Substation
Residences and Buildings
1 km Buffer from Residences
Secured Private Lands
Provincial Crown Lands
Roads
Sound Level (dBA)
35 40

45

00

Scale: 1:50,000 Kilometers 0 0.5 1

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 The Guide to Preparing an EA Registration Document for Wind Power Projects in Nova Scotia requires that wind farm design and siting does not cause sound levels to exceed 40 dBA at the exterior of receptors.
Turbine markers are not to scale.

3. Phase I turbines have been awarded contract by NSPI. Future turbines are anticipated to be awarded contract through various opportunities.

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