PERMITTING & CONSULTATION PROCESS

Consultation Process

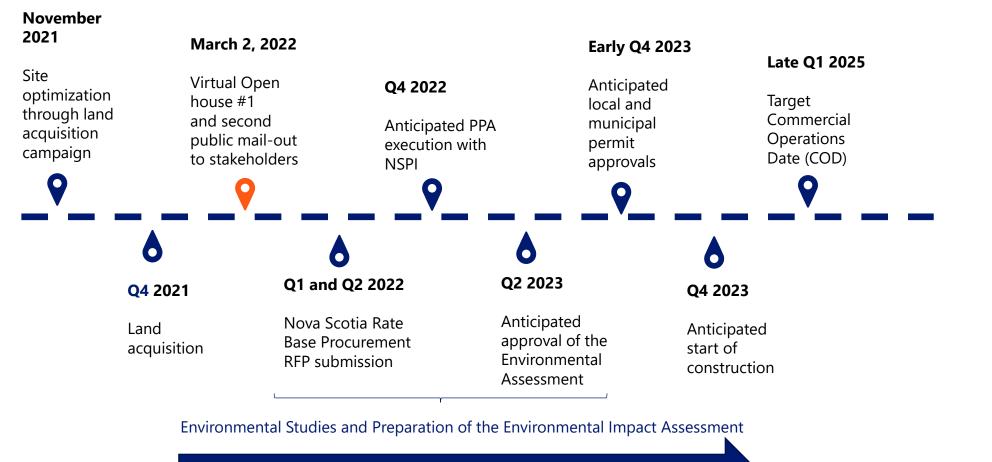
- We take community engagement and public consultation seriously.
- Public consultation will continue throughout the project lifecycle.
- EDF RC understands that there may be new neighbours in the project area after the Nova Scotia Rate Base Procurement submission and throughout construction and operation stages of the project. We will include and engage with our neighbours to provide updates on the project and respond to any interests they may have.
- With Covid-19, we adapted our engagement practices to keep you and our team members safe. Although we are not able to meet in-person, we remain available for public consultation through online methods.
- You can always reach us at: 1-844-576-1139 and <u>CA-upperaftonwindproject@edf-re.com</u>. We also suggest visiting our project website <u>https://www.edf-re.com/project/upper-afton-wind/</u> for more project details.







Anticipated Project Timeline*



Ongoing: Resource Assessment & Stakeholder engagement and consultation

* Schedule is subject to change



Avian & Bat Impacts

Well-sited wind projects should have minimal impacts upon local bird and bat populations.

- EDFR plans to undertake all required bird and bat studies to quantify potential risks and implement mitigation measures to ensure sustainable development.
- Potential impact on birds and bats was considered in the site identification process for the Upper Afton Renewable Energy.
- A post-construction wildlife monitoring program will be undertaken to determine effects.



A report published in Avian Conservation & Ecology stated:

"Overall...the effects of collisions, nest mortality, and lost habitat on birds associated with Canadian wind farms appear to be relatively small compared to other sources of mortality."

Source: Zimmerling, R. J., Pomeroy, A.C., d'Entremont, M. V., and Francis, C.M. (2013)



Environmental and Technical Activities Underway

- EDF Renewables has commissioned McCallum Environmental Ltd. (MEL) to complete a desktop constraint and preliminary field assessment for the proposed Project.
- The Project will follow the **Guide to Preparing an EA Registration Document for Wind Power Projects**, below includes the planned environmental assessments to ensure the Project's compliance with environmental guidelines and regulatory standards:
 - Avifauna spring and fall migration, including radar and acoustic studies
 - Owl surveys
 - Breeding bird surveys
 - Common nighthawk surveys
 - Bat activity monitoring during spring (May June) and fall (July Sept) migration.
 - Botanical and vegetation community surveys
 - Wildlife and wildlife habitat
 - Wetlands and watercourses wetland delineation, functional assessments and watercourse evaluations.
 - Fish and fish habitat for watercourse crossing locations
 - Noise impact assessment
 - Shadow flicker assessment
 - Radiocommunication system impact assessment
 - Visual impact assessment
- In the upcoming months, we will be completing all wildlife field studies. We will work with MEL to ensure a robust understanding of the site, of its potential impacts and an optimization of the Project.

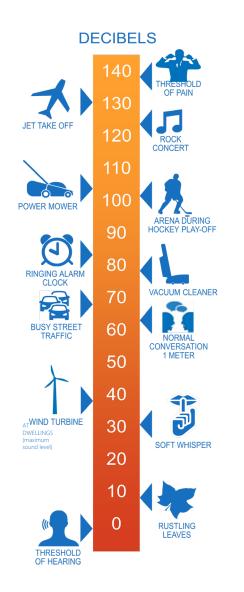






Technical Studies

- In Nova Scotia, proponents must ensure that the wind project does not cause sound levels to exceed 40 dBA (Aweighted decibels) at the exterior of receptors.
- A Noise Impact Assessment will be completed for all residences within 2 kilometers of the proposed wind turbines and project substation.
- The results of the Noise Impact Assessment will be used to determine the final turbine layout.
- A minimum distance of 600 m will be applied from all non-participating dwellings.



Noise Impact Assessment



Technical Studies

- Shadow flicker is caused when the turbine blades cast a shadow on nearby residences.
- Residences within 2 km of the project will be considered in the shadow flicker analysis.
- We are modelling shadow flicker during the Project layout design phase. The shadow flicker results will be presented on a color scale that correlates with the annual hours of adjusted case shadow flicker.
- This study will consider the probability of cloud cover, but it will not consider the orientation of residences or the location of windows in residences.
- All residences will fall within accepted thresholds by the Nova Scotia Environmental Assessment Branch:
 - 30 minutes per day; and
 - 30 hours per year.

Shadow Flicker Analysis

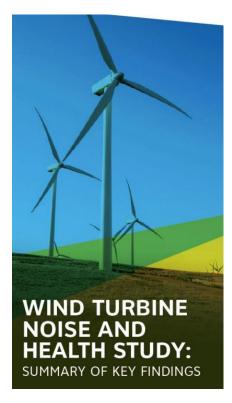


Health Canada Study: Wind Turbine Noise and Health Study

In 2014, Health Canada commissioned a \$1.2 million study on the potential impacts of wind turbines on human health. A hardcopy of the key findings' brochure is available. Please ask any EDFR staff for a copy.

- Illness and disease
 - No evidence was found to support a link between exposure to wind turbine sound and any of the self-reported illnesses and/or chronic conditions.
- Stress
 - No association was found between the multiple measures of stress and exposure to wind turbine sound.
- Sleep
 - No association between wind turbine sound and self-reported or measured sleep quality.
- Annoyance and quality of life
 - No association was found with any significant changes in reported quality of life, or with overall quality of life and satisfaction with health.*

Ontario Chief **Medical Officer's** 2010 report which concluded: There is **"no scientific evidence"** of any direct causal link between wind turbines and adverse health effects."



*Assessed using the World Health Organization's Quality of Life Scale.

