Crown Land Application Investigative Plan – Wind Power

Applicant: 0887581 B.C. LTD.

Site Name: Findlay Wind

1.0 Background

1.1 Project Overview

This Investigation Plan supports the application for an Investigative Licence for wind power, located near the community of Mackenzie, British Columbia. The project has been named Findlay Wind. The Investigative Licence will enable the investigation of the wind resource within the Licence area to evaluate the potential for the future development of a wind energy project at this location.

The project is expected to have a capacity of approximately 140 MW, comprising 20 turbines, each with a rated capacity of 7.0 MW.

The application area's centroid is approximately 7 km east-south-east of Mackenzie, within the Fraser-Fort George Regional District, at coordinates 55.300622°, -122.958090°. The licence area comprises one polygon totaling 875 hectares, as depicted in the attached mapping and KML file. While the final project will occupy a smaller footprint, this area allows flexibility for design optimization. The investigation will assess wind resources, site access, proximity to dwellings, terrain constructability, transmission capacity, engineering considerations, and environmental and wildlife constraints. Initial conflict checks using iMapBC, ILRR Map Inquiry, and FrontCounter BC Discovery tools indicate no major impediments, with further constraints to be evaluated during the licence tenure.

1.1.1 Land Management Plans and Regional Growth Strategies

Wind power development in British Columbia aligns with the 2024 BC Hydro Call for Power and anticipated biennial clean power calls.

There are no known land management plans, strategies, or restrictions that preclude the investigation or future development of a wind energy project in this area.

1.2 Seasonal Expectations of Proposed Use

The following activities will assess site viability during the investigative phase:

a) *Wind monitoring equipment installation* – The primary purpose of this monitoring equipment is the measurement of wind speed and direction. Access via existing forestry roads. No permanent disturbance expected.

b) *Geotechnical Assessment* – A physical assessment of the Investigative Licence area may be performed to determine the suitability of the ground to support the transportation and installation of wind turbines.

c) *Public Engagement* – Early consultation with First Nations, government agencies, and community groups to identify concerns and build relationships. Discussions with the Ministry of Water, Land and Resource Stewardship (MWLRS) will be conducted to ensure that all relevant First Nations and stakeholders have been identified and that an engagement framework is agreed upon. A consultation log will be maintained.

d) *Site Access* – Site access will be via existing access roads or helicopter. Existing access roads will not be modified during the investigative phase. No roads will be constructed or reactivated without a separate road application and prior written consent from the Ministry.

e) *Archaeology Review* – The need for a review for archaeological significance will be determined as part of the early-stage consultation with the identified First Nations. Once the wind array layout has been drafted it will be shared with all interested First Nations and MWLRS.

f) *Water Courses and Fish Habitat* – A physical review of the watercourses and fish habitat within the site area may be undertaken. No negative impacts to watercourses, wetlands, fish, or the aquatic environment are anticipated during the investigative phase. First Nations will be consulted in detail regarding any watercourse assessments, potential impacts from project construction, and in developing mitigation measures for any potential impacts. Any activity concerning fish habitat will follow all guidelines of the provincial Fish Protection Act and federal Fisheries Act.

g) *Bird Species and Habitat* – Bird species and habitat will be reviewed within the site area. Specialized consultants may be engaged to aid in the review. Best management practices will be implemented to minimize any adverse effects on the listed species during the investigative phase, including complete adherence to all relevant provincial/federal enactments including Section 34 of the provincial Wildlife Act and the Water Act. A specialized consultant may be engaged to aid in the review of bird species and habitat. All work will follow the requirements of the Species at Risk Act (SARA), the Migratory Birds Convention Act, and the commitments made in the future project Development Plan.

h) *Ungulates and Other Wildlife* – Ungulates and other wildlife species monitoring may be undertaken within the application area in consultation with MWLRS and First Nations. Expert consultants will be engaged to manage the monitoring and assessment.

Activity	Brief Description	Season/ Timing	Comments
Installation of wind monitoring equipment	Place the monitoring equipment within the Licence area. This equipment may include a tower/mast of approximately 80-100m in height with supporting guy wires. The total footprint area is estimated at less than 12 square meters. The monitoring equipment may also include a LiDAR device. Site access during the IL phase will be via existing forestry roads. No permanent site disturbance is anticipated due to this activity.	Installation spring 2025. Left in place for approximately 2 years.	Limited vegetation clearing may be required.
Bird monitoring activities	May involve on-site observations by bird expert consultants.	Begin monitoring in spring 2025 and continue for 12 months ending in fall 2026.	No impacts anticipated. Best management practices will be implemented to minimize any adverse effects on the listed species during the investigative phase, including complete adherence to all relevant provincial/federal enactments including Section 34 of the Provincial Wildlife Act and the Water Act.
Water Courses and Fish Habitat	A physical review of the watercourses and fish habitat within the site area may be undertaken. A thorough review of any affected watercourses and fish habitat would be undertaken by certified biologists/hydrologists if required.	Begin monitoring in spring 2025 and continue for 12 months ending in fall 2026.	Required setbacks to watercourses will be adhered to in all cases if streams/wetlands are identified. No negative impacts to fish or the aquatic environment are anticipated during the investigative phase.
Ungulate and other wildlife monitoring activities	May involve on-site observations by expert consultants.	Begin monitoring in spring 2025 and continue for 12 months ending in fall 2026.	Best management practices will be implemented to minimize any adverse effects on the listed species during the investigative phase, including complete adherence to all relevant provincial/federal enactments including Section 34 of the provincial Wildlife Act and the Water Act.
Geotechnical Work	A physical assessment of the Licence area may be performed by an expert consultant to determine the suitability of the ground to support future wind turbines and component transportation. This may include geotechnical drilling to assess subsurface geological conditions.	The timing will be dependent on a contract award for electricity sales to BC Hydro.	Limited vegetation clearing and ground disturbance may be required.
Survey Work	Some preliminary survey work may be required to determine preferred access routes for future wind turbine delivery and foundation design. Survey work	Preliminary survey work would begin spring 2025.	No impacts anticipated.

	will use temporary ground surface tripods supporting survey equipment. No site disturbance will be required.		
Archaeology Studies	Archaeology consultants may be engaged.	Archaeology studies would begin as soon as spring 2025.	No impacts anticipated.

1.3 Engagement with First Nations

The following First Nations have traditional territories overlapping the application area, as identified in the Contacts for First Nation Consultation Areas database:

- McLeod Lake Indian Band
- Tsay Keh Dene Nation
- West Moberly First Nations
- Halfway River First Nation
- Doig River First Nation

Initial engagement with these Nations will begin promptly. Discussions with MWLRS will be undertaken to confirm the full list of potentially affected First Nations and to establish an appropriate engagement framework. A detailed consultation log will be maintained throughout the process.

During the investigative stage of the wind power project, archaeological features will be identified, assessed, and managed in accordance with provincial legislation and professional standards. A qualified archaeologist will be retained to conduct a Preliminary Field Reconnaissance (PFR) and, where appropriate, prepare an Archaeological Overview Assessment (AOA) to determine the likelihood of heritage resources within the investigative area. Based on these findings and in consultation with the Archaeology Branch, it will be determined whether a Heritage Inspection Permit (HIP), Archaeological Impact Assessment (AIA), or other authorizations are required prior to any ground-disturbing activities.

If archaeological sites are identified, avoidance measures will be prioritized. Where avoidance is not feasible, the appropriate alteration permits will be obtained in compliance with the Heritage Conservation Act. The assessment process will be initiated in advance of any physical fieldwork to support timely regulatory review and coordinated consultation with First Nations. All findings and management actions will be documented accordingly.

2.0 Location

Please refer to the Application attachments for the General Location Map.

2.1 Description

The application area's centroid is approximately 7 km east-south-east of Mackenzie, within the Fraser-Fort George Regional District, at coordinates 55.300622°, -122.958090°. The licence area comprises one polygon totaling 875 hectares, as depicted in the attached mapping and KML file.

2.2 Location Justification

The Findlay Wind energy project was identified for potential submission into a future BC Hydro clean power call.

The proposed project site offers multiple strategic advantages including an excellent estimated wind resource, proximity to transmission with available capacity, proximity to a substation with an available line position, no nearby dwellings, and access from nearby logging mains with existing forestry roads to the site.

2.3 Historical Use

There is evidence of ongoing forestry activity within the site.

3.0 Infrastructure and Improvements

3.1 Facilities

During the investigative phase it may be necessary to collect on-site wind speed data with a met-tower and/or LiDAR (light detection and ranging) device. Please refer to Appendix A for photographic examples of both. The LiDAR device's height is less than two meters, and the footprint is approximately one square meter. The LiDAR would be accompanied by either a small generator and battery bank or a hydrogen fuel cell for power. The LiDAR can measure wind speed and direction up to approximately 300m using a laser. The met-tower would likely be either 80m or 100m in height, and constructed from either tubular steel or lattice steel sections, along with steel guy wires and anchors. The anchors would be either rock anchors (requiring a small hole drilled in bedrock), or earth screw-in anchors; concrete gravity anchors will not be used. A small generator may be required if heated instruments are installed on the met-tower.

This application includes one proposed monitoring site. It is anticipated that a LiDAR will be used rather than a met-tower at this site due to accessibility. The LiDAR would be delivered to the site by helicopter. The chosen location is justified by its excellent exposure to wind flow from all directions, situated on terrain that is representative of the broader site. Furthermore, the monitoring site is positioned within a clearing, minimizing the need for new disturbances during the investigation. No new vegetation clearing will be required. No impacts on waterways, wildlife, or archaeological sites are expected.

A Statutory Declaration will be submitted when any on-site monitoring or site investigations have occurred or are planned, and the location of any on-site monitoring equipment will be identified.

One wind monitoring location has been included as part of this Investigative Licence application, please refer to the table below:

Monitoring location 1	**501013.17 m E (UTM Zone 10U)**	**6130595.38 m N**

3.2 Infrastructure/Access

During the investigation phase the site will be accessed by helicopter or by 4x4 truck via existing forestry service roads departing from Highway #39

3.3 Utility Requirements and Sources

There are no utility requirements during the investigative phase.

3.4 Water Supply

There are no water requirements during the investigation phase.

4.0 Invasive Species Management Plan

This plan outlines basic measures to prevent and manage invasive plant species, in alignment with the Forestry Operations Factsheet (Invasive Species Council of BC, April 2019). The focus is on prevention, early detection, and coordination to minimize ecological impacts on soil productivity, biodiversity, and range resources.

Key actions include:

1. Identify Priority Species: Determine priority invasive plant species within the licence area using resources like the Invasive Alien Plant Program (IAPP) database and collaboration with Regional Invasive Plant or Species Organization coordinators.
2. Staff Awareness: Ensure staff and contractors are trained to identify invasive plants present in or near the operating area, leveraging regional expertise from the Ministry of Forests, Lands and Natural Resource Operations and Rural Development (MFLNRORD).
3. Regular Surveys: Conduct regular detection surveys to record invasive plant locations (species, date, UTM coordinates, and estimated area) and report findings to regional coordinators or MFLNRORD specialists.
4. Equipment Management: Keep equipment out of infested areas where possible, inspect vehicle undercarriages for plant material, and dispose of any material appropriately (on-site if no flowers are present, or bagged and discarded locally if flowers are present).
5. Prevention Practices: Wash seeds and propagules from equipment and gear before leaving sites, and minimize soil disturbance during investigative activities.
6. Re-vegetation: Promptly re-vegetate disturbed areas using a quality weed-free forage seed mixture (confirmed by a Certificate of Analysis) to restore rangeland integrity.

This plan complies with the BC Forest and Range Practices Act and Weed Control Act, emphasizing prevention as the most cost-effective strategy. Ongoing monitoring and coordination with regional experts will ensure invasive plant risks are mitigated, protecting the ecological health of the licence area and surrounding rangelands.

Appendix A

Example of an 80m lattice met-tower

Example of a LiDAR device