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WELCOME

Blue Hills Wind Project

Open House

WELCOME

- SaskPower and Algonquin Power have agreed on a change of location for a 177 megawatt (MW) wind project to the location between Herbert and Neidpath in southwest Saskatchewan

- This first Open House provides:
  - background information on Algonquin Power
  - general project and wind power information
  - This is the first of multiple public open houses

- Public consultation and input is an important part of the Project design and the Environmental Assessment

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WHO IS ALGONQUIN POWER CO.?

- 35 renewable and clean energy facilities with more than 1,300 MW of capacity
- 511 MW of contracted projects in development/construction

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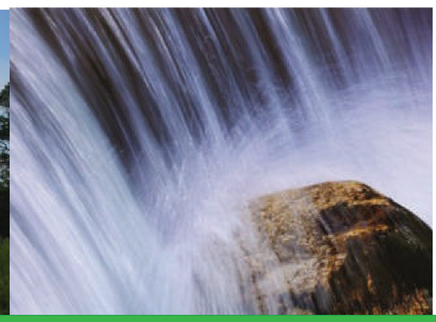
- A Subsidiary of Algonquin Power and Utilities Corp., Algonquin Power Company (APCo) is a non-regulated generation business that owns a widely diversified portfolio of operating interest in hydroelectric, wind energy and other energy projects across Canada and the United States

- APUC, has been traded on the Toronto Stock Exchange since 1997 and the New York Stock Exchange since 2016

- Algonquin's St. Leon I and II Wind Energy Project in Manitoba is one of the largest in Canada
  - 63 turbines completed in 2005 with an expansion of 10 additional turbines in 2012



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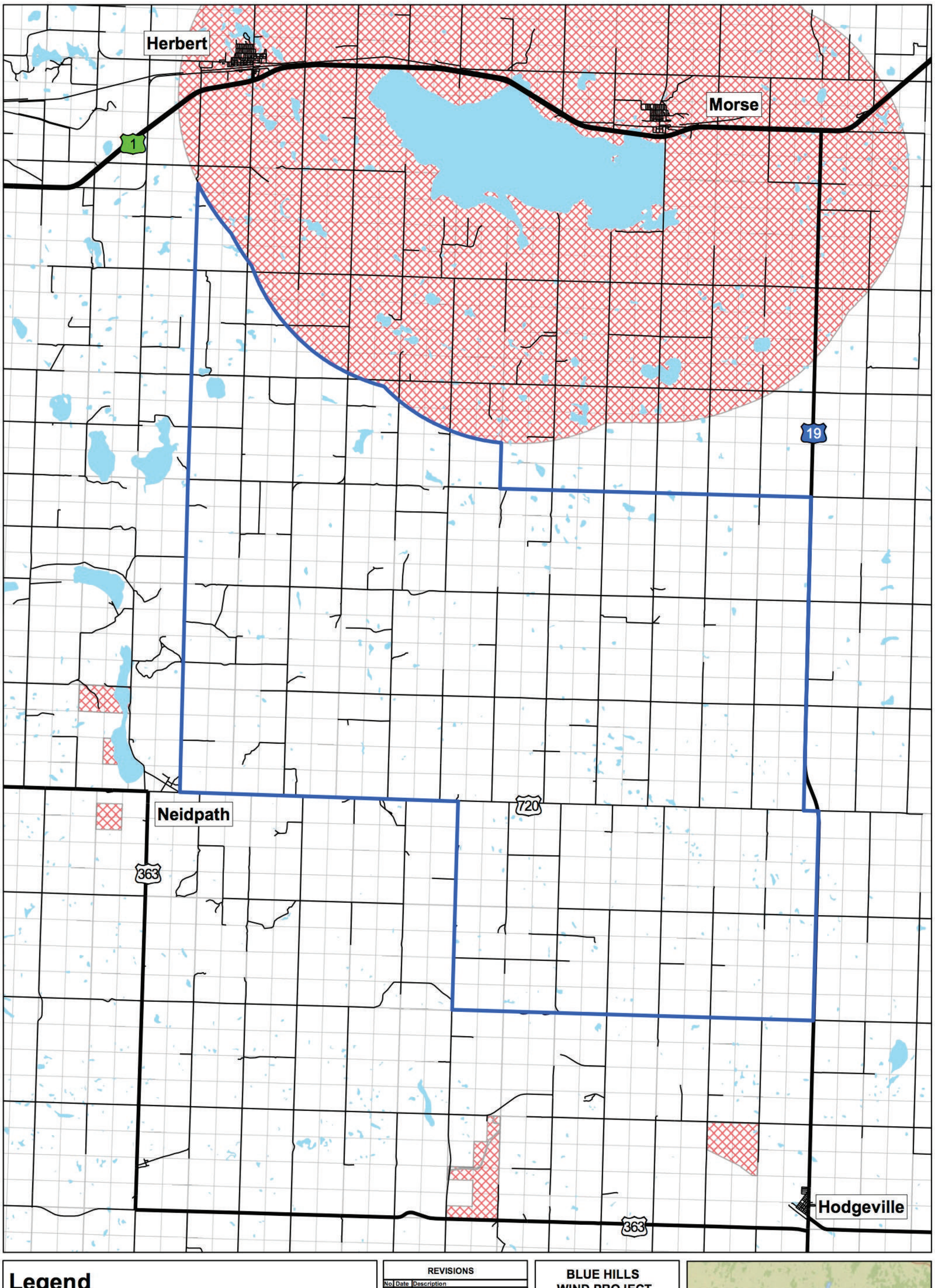
BLUE HILLS WIND PROJECT LOCATION



Legend

- Municipal Road
- Highway
- Quartersections
- Project Studay Area
- Avoidance Zones
- Waterbodies

DRAFT

REVISIONS

No	Date	Description

0 850 1,700 Meters

1 cm = 1,085 meters

N

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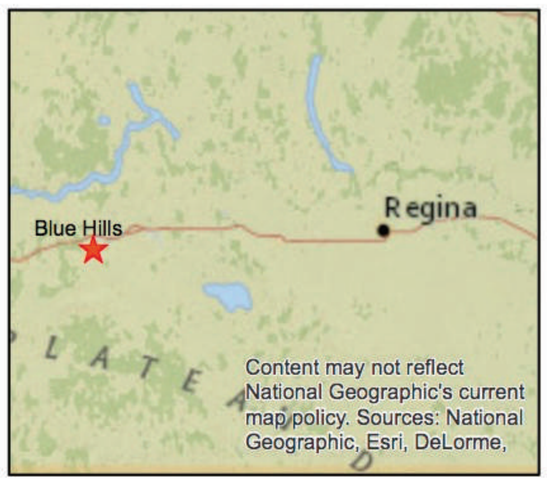
ALGONQUIN POWER Co.

BLUE HILLS WIND PROJECT

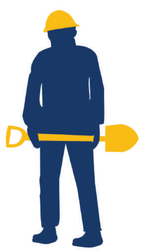
TITLE:

Site Map

DATUM/PROJECTION:	SCALE:
NAD83/ UTM ZONE 13N	1:108,538
DRAWN BY: D THOMPSON	DATE: JAN 9, 2017
DRAWING No. BLUE - 114	REVISION No. 0



THE BLUE HILLS WIND PROJECT



- An Environmental Impact Assessment will be undertaken

- The proposed project could involve construction of approximately 50 to 77 turbines *number could change

- Other project components will include:
  - Access Roads to the Turbines
  - Cabling to a Collector Station
  - [Interconnection to Transmission Line Substation]
  - Operations and Maintenance Building
  - Crane Pads
  - Project Substation
  - Meteorological Towers

- SaskPower will be conducting an Interconnection System Impact Study, to determine how the project will be connected to the transmission grid

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ABOUT WIND POWER

- Wind Power is renewable power
- Use of wind power reduces consumption of fossil fuels and offsets greenhouse gas emissions
- Wind Power uses fewer resouces than conventional energy sources

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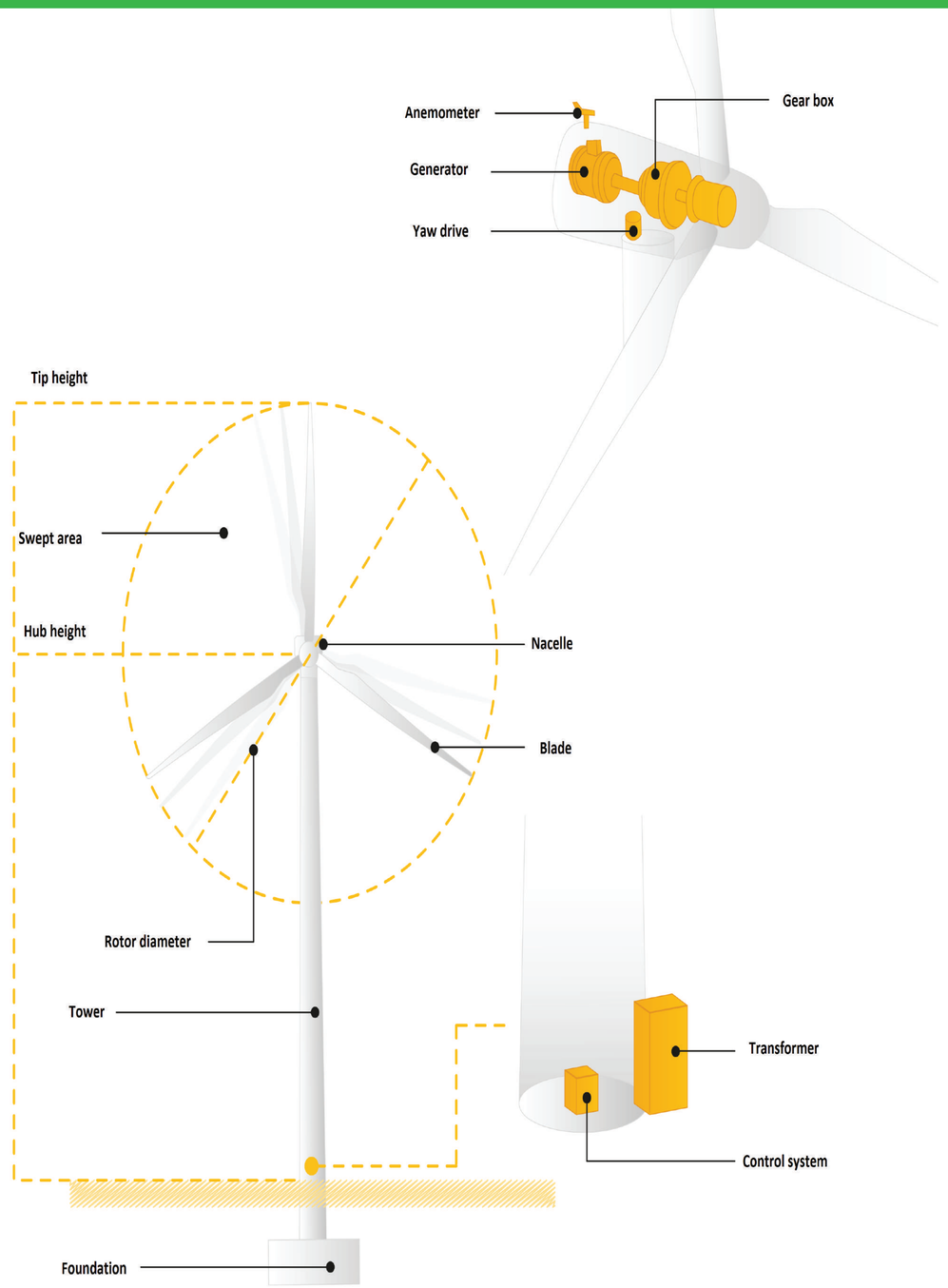
HOW DOES WIND POWER WORK?

TURNING WIND INTO ELECTRICITY

Wind power is the fastest-growing energy source in the world. Turbines powered by wind are mounted on towers 100 or more feet above the ground, where the wind is faster and less turbulent.



HOW IT WORKS

(1) When the blades start moving, they spin a shaft that leads to a generator.

(2) The generator consists of conductor, such as a coiled wire, that is surrounded by magnets.

(3) The rotating shaft turns the magnets around the conductor and generates an electrical current.

(4) Sensors cause the top of the turbine to rotate to face into the wind and the blades change their angle to best catch the wind. The blades are flexible and stop spinning if wind is too strong.

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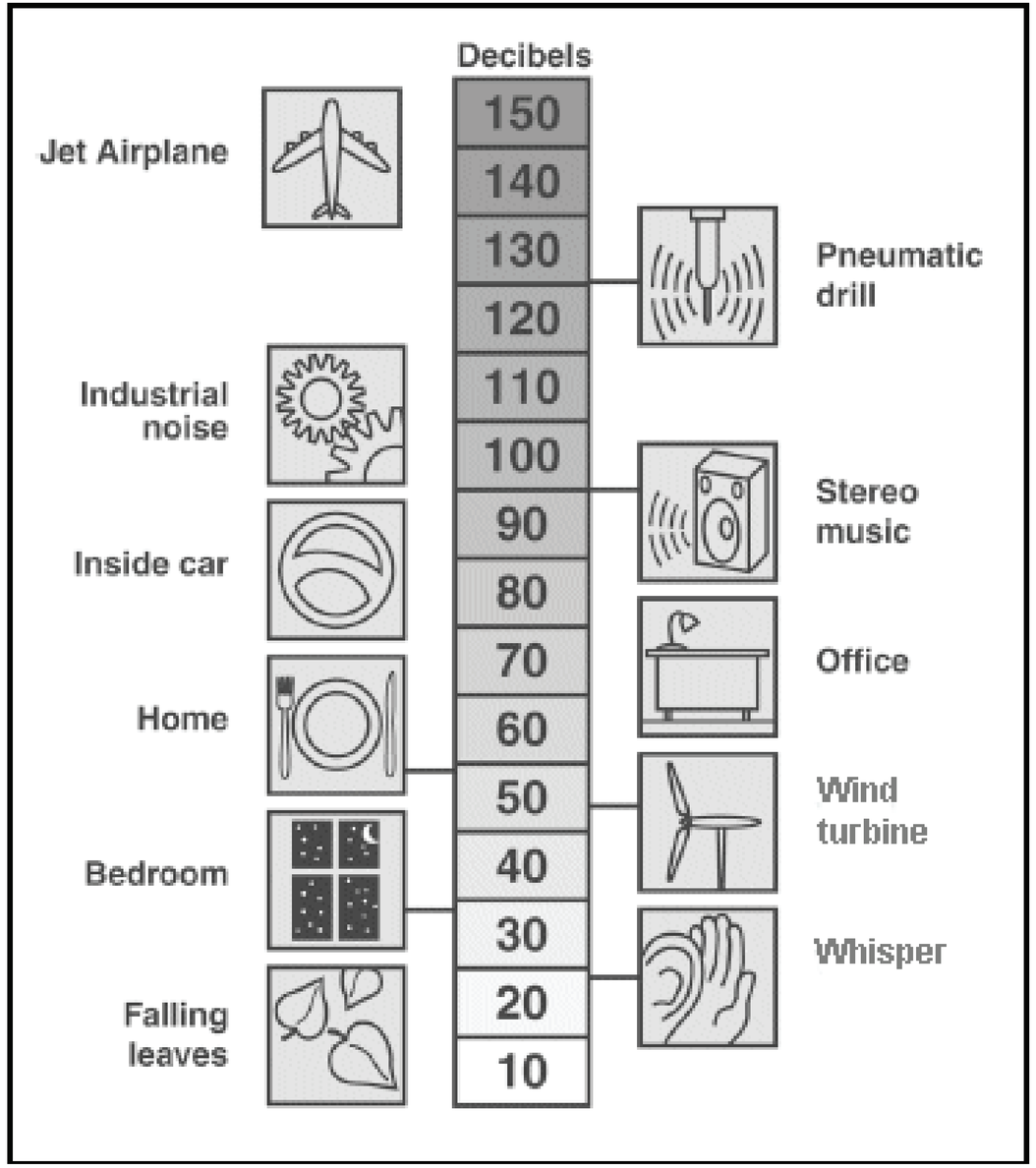
WIND POWER TECHNOLOGY



- The efficiency of wind turbines has increased greatly and has made this power source more attractive to utilities

- Wind turbines typically utilized in Canada produce between 1 and 3.5 MW of power

- Continuous technological and siting design improvements reduce environmental impacts

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THE TURBINE SITING PROCESS

- Characteristics of Local Wind
- Prefer cleared or open land and avoidance of tall buildings or forested areas
- Landowner consultation and considerations
- Avoid sensitive areas (wetlands, sensitive wildlife habitat, etc)
- Setback distances from roads, buildings, etc.
  - municipal bylaws
  - industry standards and practices
  - Provincial Wind Siting Guidelines
  - Sound levels, safety, etc.

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APPROXIMATE CONSTRUCTION TIMELINE

Spring 2020

Construction Starts - Access road entrance

Turbine foundation excavation and concrete base pouring. Turbine deliveries begin.

Electrical collector line installation and Substation construction

Fall 2020

Wind turbine erection begins

Tower wiring begins

Reclamation of sites where Turbines have been erected.

Electrical testing of substation, collection and turbines.

Reclamation of sites completed.

December 2020

Commercial Operation

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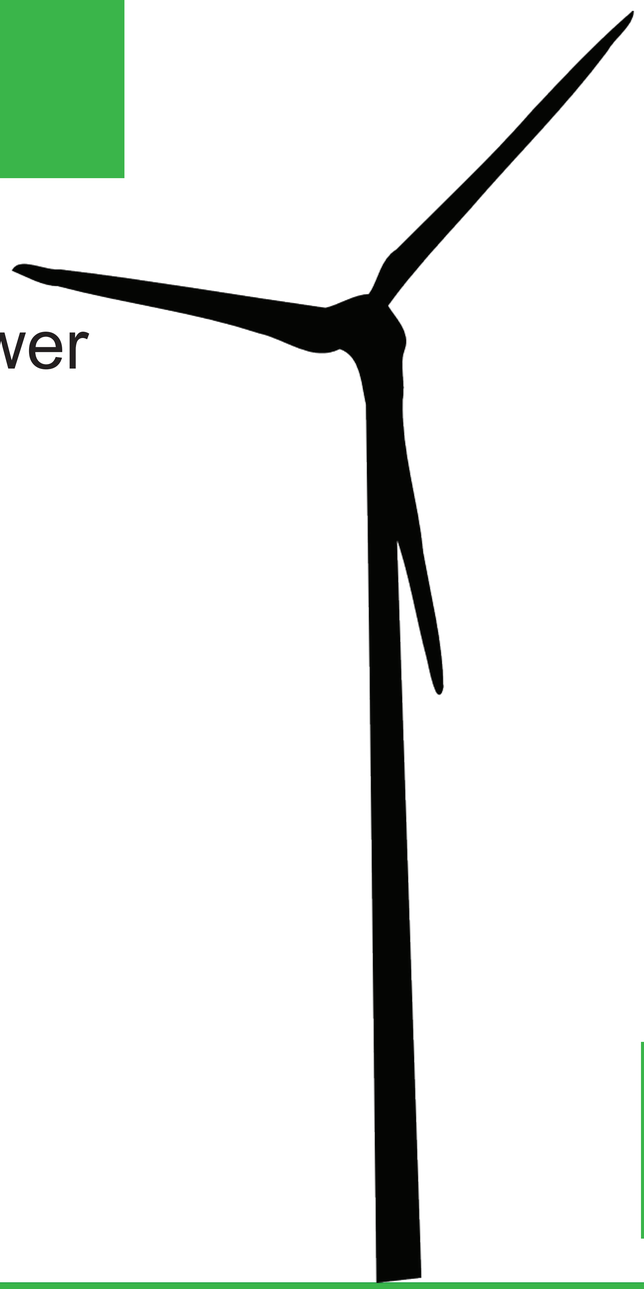
WIND TURBINE SITING FACTORS



- Wind Data from MET Tower

- Provincial Regulations
  - Turbine Siting Guidelines

- Local Regulations
  - Official Community Plan
  - Zoning By-laws
  - Other Restrictions

- Land Assembly
  - Participating Landowners

- Environmental Factors
  - Wildlife (plants and animals)
  - Wetlands

- Built Environment
  - Road Network
  - Buildings / Residences

- Topography

- Archeological Investigation

THE ENVIRONMENTAL ASSESSMENT

- The Project team will consult with the Saskatchewan Ministry of the Environment to ensure that all aspects of the proposed Environmental Assessment, at a minimum, meet established criteria.
- The Environmental Assessment process will involve consultations with RM's, government agencies and non-government agencies.
- Consultations are an important part of the process where valuable information can be exchanged and considered as the Project is developed.

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PUBLIC, HEALTH AND SAFETY

- Traffic Management Plan for safe management of traffic and delivery of materials along public roads
- Limiting access to construction sites to minimize hazards to the public
- Implement:
  - Emergency Response Plan
  - Communications Plan
  - Spill Response Plans
  - Training for Construction Staff
- Train operations staff and implement operations and maintenance protocols to minimize risks to public health and safety
- Project turbines will be supplied by an established turbine manufacturer

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PRELIMINARY FINDINGS - ENVIRONMENTAL EFFECTS

- Local studies are just beginning; experience elsewhere suggests no significant adverse effects from the project
  - minimal disturbance from sound levels
  - new turbines designed to lessen wildlife effects
  - aesthetics of the projects are subject to individuals preferences
- Project-specific investigations (wildlife surveys, heritage resource assessment) will be occurring soon
- Use of Wind power can offset the production of millions of kg of CO_2 (greenhouse gases)

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DECOMMISSIONING THE PROJECT

- Decommissioning activities would be similar to construction activities

- Sites could be returned to pre-project conditions including removal of infrastructure to below ground level and replacement of topsoil

- Most turbine components are recyclable

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THANKS FOR ATTENDING

Please help yourself to the refreshments
as you complete the questionnaire.

Thank you for providing your views!

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