WELCOME

Blue Hill 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 second Open House provides:

  - background information on Algonquin Power and introduction to Liberty Power

  - General project information

  - Update on the Environmental Assessment Process

  - This is the second of multiple public open houses

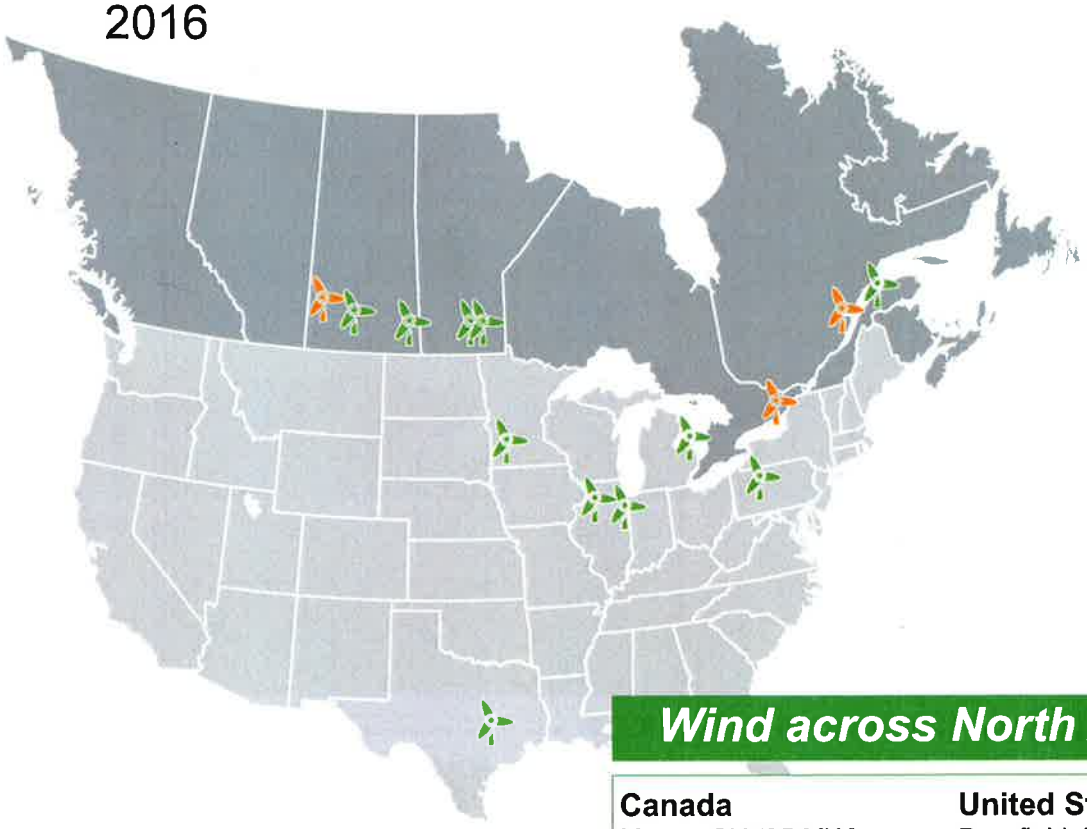
  - An opportunity to ask any questions

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

ABOUT LIBERTY POWER

- A subsidiary of Algonquin Power & Utilities Corp., Liberty Power (formerly known as Algonquin Power Co. or "APCo") is a non-regulated generation business that owns or has interests in a portfolio of North American based contracted wind, solar hydroelectric, and natural gas powered generating facilities representing approximately, 1,050 MW of installed capacity.

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



Wind across North America

Canada	**United States**
Morse, SK (25 MW)	Deerfield, MI (150 MW)
Red Lily, SK (26.4 MW)	Minonk, IL (200 MW)
St-Damase, QC (24 MW)	Odell, MN (200 MW)
St-Leon I, MB (104 MW)	Sandy Ridge, PA (50 MW)
St-Leon II, MB (16.5 MW)	Senate, TX (150 MW)
	Shady Oaks, IL (109.5 MW)

Total 1,055 MW

THE BLUE HILL WIND PROJECT

- The Environmental Impact Assessment is currently ongoing

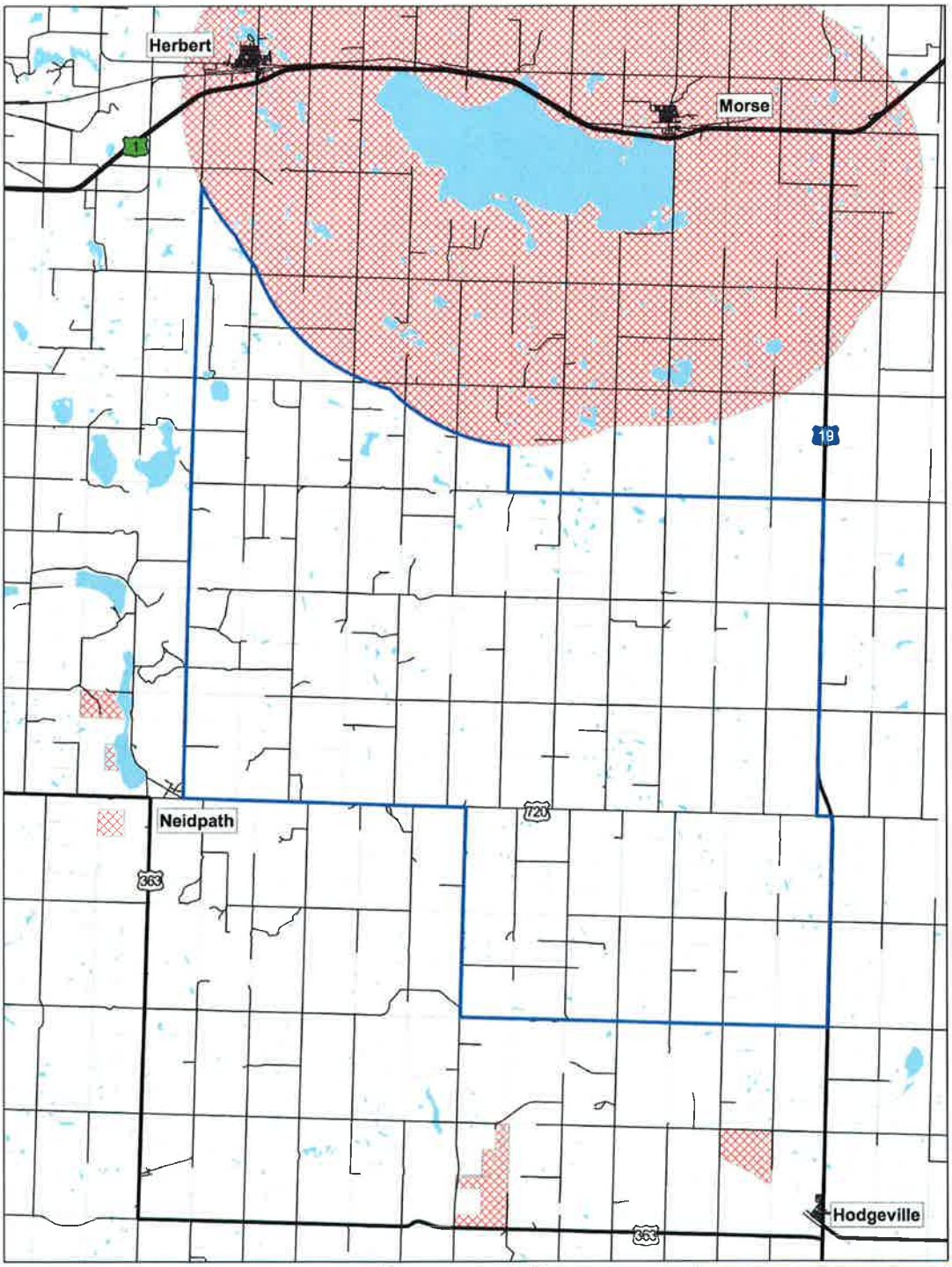
- The proposed project could involve construction of approximately 48 to 64 turbines *number could change

- 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

BLUE HILL WIND PROJECT LOCATION

Algonquin



Legend

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

DRAFT

REVISIONS

0 850 1,700 Meters

1 cm = 1,085 meters

Algonquin
ALGONQUIN POWER Co.

BLUE HILLS WIND PROJECT	
TITLE: Site Map	
DATUM/PROJECTION: NAD83/ UTM ZONE 13N	SCALE: 1:108,536
DRAWN BY: D THOMPSON	DATE: JAN 9, 2017
DRAWING No: BLUE - 114	REVISION No: 0

APPROXIMATE CONSTRUCTION TIMELINE

SPRING 2020

- Construction starts
  - Access road entrance
- Turbine foundation excavation
- Concrete base pouring
- Turbine deliveries begin
- Electrical collector line installation
- Substation construction.

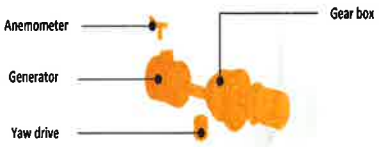
FALL 2020

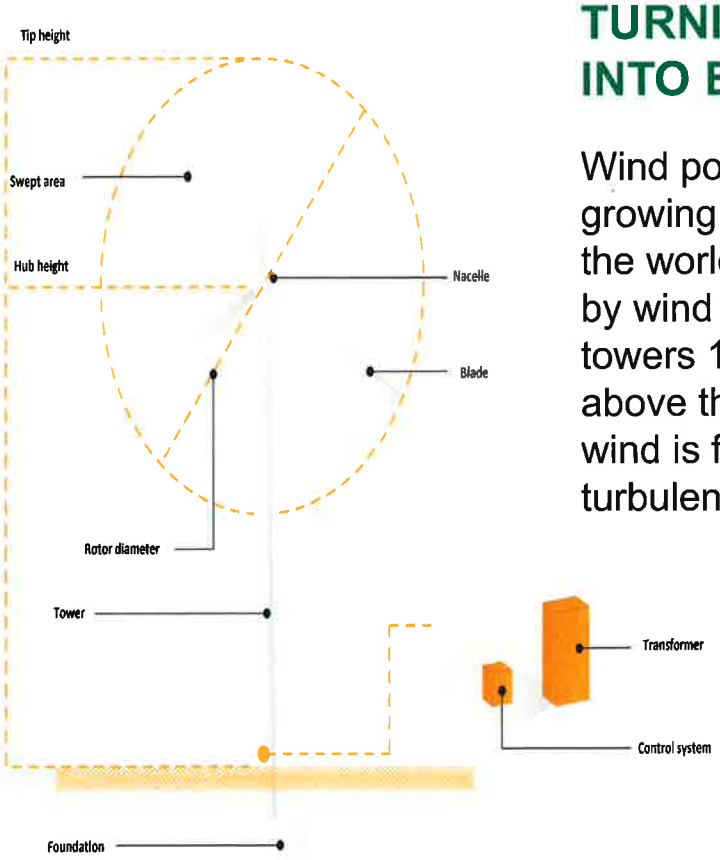
- Wind Turbine erection begins
- Tower wiring begins
- Reclamation of sites where turbines have been erected
- Electrical testing of substation, collection and turbines
- Reclamation of sites completed

December 2020

- Commercial Operation

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.

THE TURBINE SITING PROCESS

- Setback distances:
  - Municipal By-laws
  - Industry Standards & Practices
  - Provincial Wind Siting Guidelines
  - Sound Levels
  - Safety
- Archeological Investigation
- Environmental Factors
- Visual Impact

- 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)

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

- Most modern wind turbines at a distance of 600 metres generate a maximum noise level of 30 - 40 decibels. This is equivalent to the sound level in a library.

ADVANTAGES OF WIND ENERGY

Wind Energy has many advantages over traditional forms of energy derived from fossil fuels. These include:

Zero Emissions
A wind farm does not emit any harmful emissions into the environment.

Reduces our Dependence on Fossil Fuels
Wind Energy provides an alternative to traditional energy producton from fossil fuels such as oil and gas.

Long Lifecycle
The useable life of a wind turbine can be up to 20 years.

Efficiency
Wind farms can be located anywhere in Saskatchewan close to the point of consumption, which improves the efficiency of our electricity grid.

Grid Stability
A Wind Farms production peaks mid-day which corresponds to peak energy usage, therefore reducing the infrastructure required to meet our peak energy usage.

Grid Parity
The cost of wind energy is continually declining and will eventually become cost competitive with other forms of energy.

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

Environmental Assessment

Studies planned for the Project:

- Wildlife surveys
- Vegetation and wetland surveys
- Heritage resource impact assessment
- Noise Assessment

Information collected will be used to:

- Refine the siting of turbines and access within the Project Area
- Develop mitigation to address potential effects
- Prepare an Environmental Impact Statement (EIA) to be submitted to the Saskatchewan Ministry of Environment

Environmental Assessment

Surveys completed to date:

- Grouse Lek Surveys
- Raptor Nest Surveys
- Spring Bird Movement Surveys
- Spring Bat Activity Surveys

Upcoming studies include:

- Breeding Bird/ Burrowing Owl Surveys
- Common Nighthawk/ Short-eared Owl Surveys
- Rare Plant and Wetland Surveys
- Fall Bird Movement Surveys
- Fall Bat Activity Surveys
- Heritage Resource Impact Assessment
- Noise Assessment

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

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

THANKS FOR ATTENDING

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